Service Manual

ViewSonic E90f/fb-1

Model No. VCDTS23307-1M
VCDTS23307-1M1

19" Digital Controlled Color Monitor
(18" viewable)

(E90f/fb-1_SM_485 - Rev. 1a – March 2002)

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Revision History

Revision	Date	Description Of Changes	Approval
1a	3/6/02	Initial Issue – DCN2114	T. Sears

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1.PRECAUTIONS AND NOTICES

1.1 **SAFETY PRECAUTIONS**

1) Observe all cautions and safety related notes located inside the display cabinet and on the displaychassis.

2)Operation of this display outside the cabinet or with the cover removed, involves ta shock harzard from the display power supplies. Work on the display should not be attempted by anyone who is not thoroughly familiar with precautions necessary when working on high voltage equipement.

3)Do not install, remove or handle the picture tube in any manner unless shatter-proof goggles are worn. People not so equiped should be kept away while handling picture tube.Keep picture tube away from body while handling.

1.2 Observe all cautionary and safety related notes located on the chassis , cabinet and display tube.

1.3 Operation of the monitor with the back cover removed presents a potential shock hazard. Only personnel familiar with the precautions necessary for safe working on high voltage equipment should attempt to carry out servicing.

1.4 Always wear shatter proof goggles when removing, installing or generally handing the picture tube. People not so equipped should be kept at a safe distance when any such handing is being undertaken. Do not handle the picture tube by the neck of deflection coil. Do not carry the picture tube resting against the body.

1.5 The picture tube is designed and constructed to limit X-Radiation to a safe level during normal operation. To maintain the required level of protection and safe operation, replacement tubes must be correctly adjusted and any protective circuits must not defeated.

1.6 **IMPORTANT-Safety Tests**

After servicing, and before returning the monitor to the user, a thorough safety test must be carried out to ensure there is no potential shock hazard to any operator(s) using the monitor.

All the following test must be performed. A monitor failing any of these tests should be rejected and have the problem rectified.

1.7 **A.C. Leakage Test**

Remove the power sourse. Connent the monitor to the circuir as in figure 1 below. Switch the monitor on/off switch to on. A reading of less than 3.5mA should obtained (ref. EN60950).

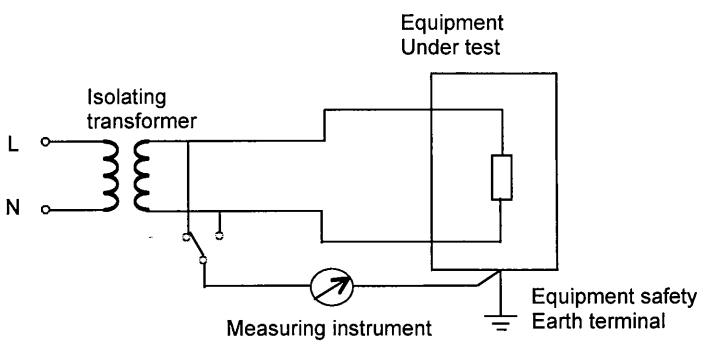

Fig. 1 Measurement of AC Leakage Current.

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1.8 **Voltage Breakdown Test**
Connent the live and neutral connections together. Switch the monitor on/off switch to on Apply 1500VAC RMS or 2250VDC, 50Hz for one minute between live and neutral shorted together and earth. Ensure no voltage breakdown occurs.

1.9 **Earth Resistance/Continuity Test**
Measure the resistance between the signal cable metal shell and the earth pin in the A.C. socket. At a current of 25 amperes the resistance should be less than 100m.
NOTE:A portable appliance tester (PAT) is a suitable instrument to use for the above safety tests.

1.10 **H.V. Over Voltage Portection (Required for X-Radiation Safety)**
Adjust R176 slowly anti-clockwise until the over voltage protection circuit is activated, and the high voltage must be less than 33KV at this moment. After test, R176 should be adjusted back to normal(=26.2KV)

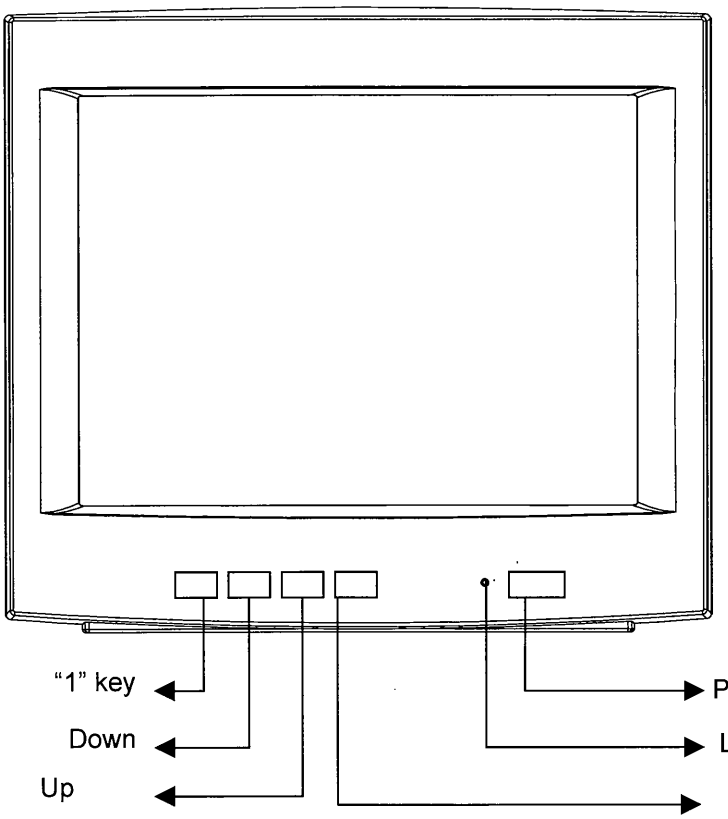
CAPACITOR:				
C850	400V	4700PFM	CAPACITOR.CERAMIC	5230105501
C851	400V	4700PFM	CAPACITOR.CERAMIC	5230105501
C135	250V	33UFM	CAPACITOR.ELECTROLYTIC	5214433012
C139	100V	330UFM	CAPACITOR.ELECTROLYTIC	5214019612
RESISTOR				
R827		2K	RESISTOR.VS	5162161220
SEMICONDUCTORS				
I803	UC3842N		IC LINEAR	6644063111
I301 (RA)	TDA9113 SDTP-32		IC.LINEAR A.S.D.C.	6644076305
I301 (RB)	TDA9116 SDTP-32		IC.LINEAR A.S.D.C.	6644076308
I101	TDA8172 7P		IC.LINEAR	6644076000
IA01	UC3842N		IC.LINEAR	6644063111
Q801	NT68F62U SDIP-42		IC.LSI MCU	6647008204
Q433	2SK2648		TR FET MOS	6626003208
Q121	BU4525AX		TR NPN	6621002801
D807	2SK2628		TR FET MOS.	6626005102
D827	HZ5C1		DIODE ZENER	6615007834
OTHERS				
SR801				
F801	OSA-SS-212DM5		RELAY	5054613402
T801	250V/3.15A		FUSE	5054431539
T101	TPW-697		POWER TRANSFORMER	5061369700
T101	TFB-280T		TRAQNS.FLYBACK COLOR	5062628031
T101	TFB-280L		TRAQNS.FLYBACK COLOR	5062628032
V901 (RA)	M46AJS53X76(U)		CCRT/DY	5051286279
V901 (RB)	M46QCK761X123		CCRT/DY	5051286299

2.SPECIFICATION

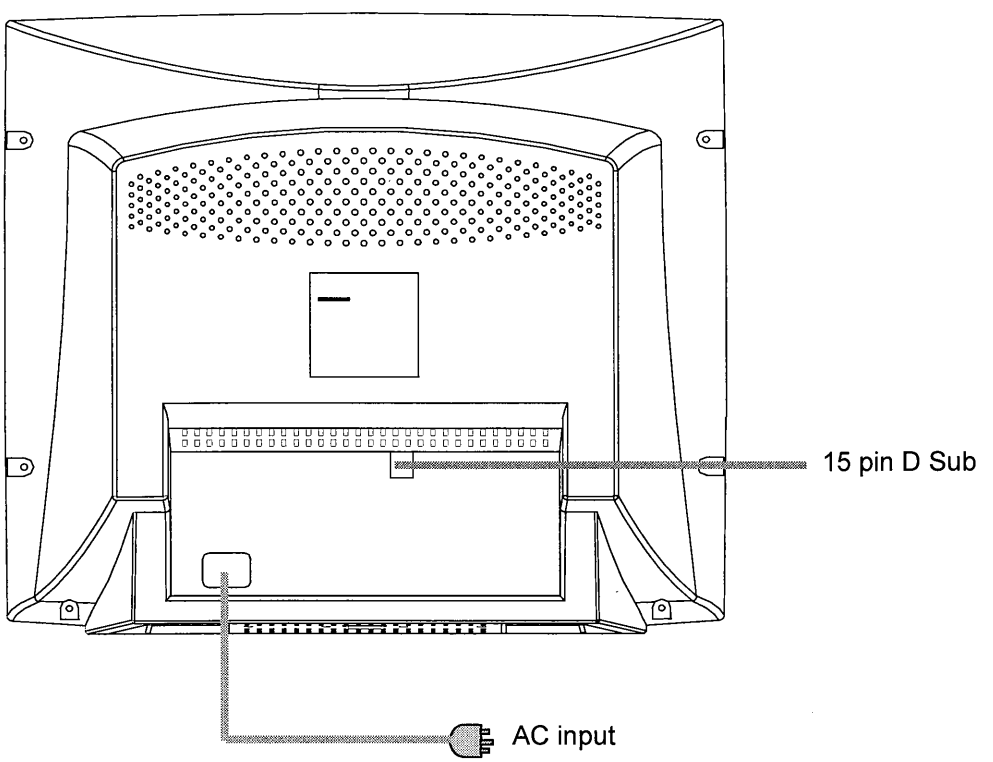
CDT	Size and deflection angle		19 inch 90 degree
	Screen type		Pure Flat
	Horizontal pitch / Dot pitch		0.22mm / 0.25mm
	Surface treatment		Anti-static AR coating
	Transmission rate		46%
Scanning Freq.	Horizontal Frequency		30kHz to 86kHz
	Vertical Frequency		50Hz to 150Hz
Video amplifier	Applicable pixel rate		162MHz
Resolution	Maximum		1600 x 1200
Modes	Factory preset/User modes		13 / 10
Power	AC input range		100 to 240 Vac
	Max. power consumption		<120W
	Power Management	Suspend	<3 W
		Off	<3 W
User controls	Power Switch		On/off with Led indicator
	Up/Down adjustment Key		2 key pads for adjust Up / down keys are direct access for Contrast And Brightness adjustment
	"2" Key		As a select key/ go to next sub menu
Rear connection	Signal connections	Standard Model	1.5 m signal cable with 15Pin D shell miniature male connector.
	Power input		AC socket with 1.8 meter cable
Agency Approvals	European	Safety	CB,BSM2,VPSB,C-TICT,TUV/S(Argentina)
		Emissions	EN50081-1
		Immunity	EN50082-1
		Ergonomic	ISO9241Paart3 &ISO9241Part8
			ZH1/618
		VLMF	MPRII
	USA	Safety	UL1950
		Emissions	FCC class B
		X-ray	DHHS
	Japan	Safety	EIAJ
		Emissions	VCCI category 2
Plug and Play	DDC 1/2 B		Version 2
Environmental Conditions	Operating Temperature Storage Temperature		10°C to 40°C –30°C to +60°C
	Operating Humidity		10% to 90%
	Storage Humidity		10% to 95 %
Dimensions	W x H x D		575 mm x 600mm x 630mm
Weight	Kg		25.5Kg (Gross)

3.CONTROL LOCATION AND FUNCTIONS

Front



Rear



Function Keys Description:

(a) Key fuction:

Power switch: This is a "software Key", Turns the display on and off. The power indicator will be "Green" when the display is on.

"1" key : Turn on /off OSD menu / Exit this menu to go back previous menu

▽ : Moves down to select item / decrease value

△ : Moves up to select item / increase value

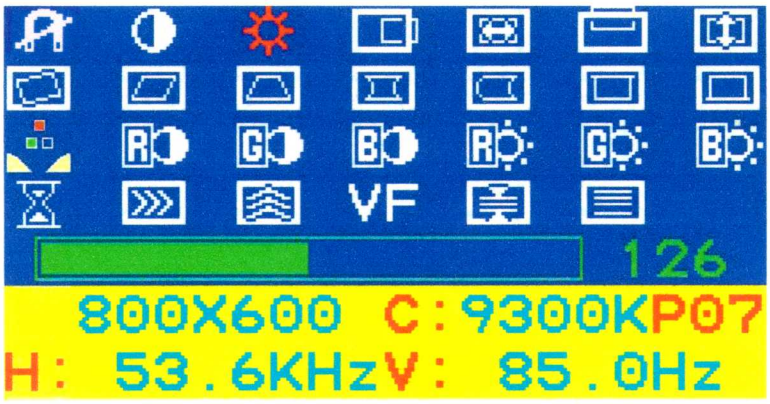
▽ △ : keys are direct access for Contrast and Brightness adjustment

"2 " key : a select key / go to next sub menu.

(c). Pressing "2" & power keys at same time will enter the Factory optimized OSD Menu.

(d). Selecting the icon and then pressing "2" key will demagnetize CDT, if pressing for more than 3 sec will force MCU to enter burn in state for production line burning.

Factory OSD Menu



OSD menu descriptions:

Press "**1**" key to display a basic main menu (1) as shown below.

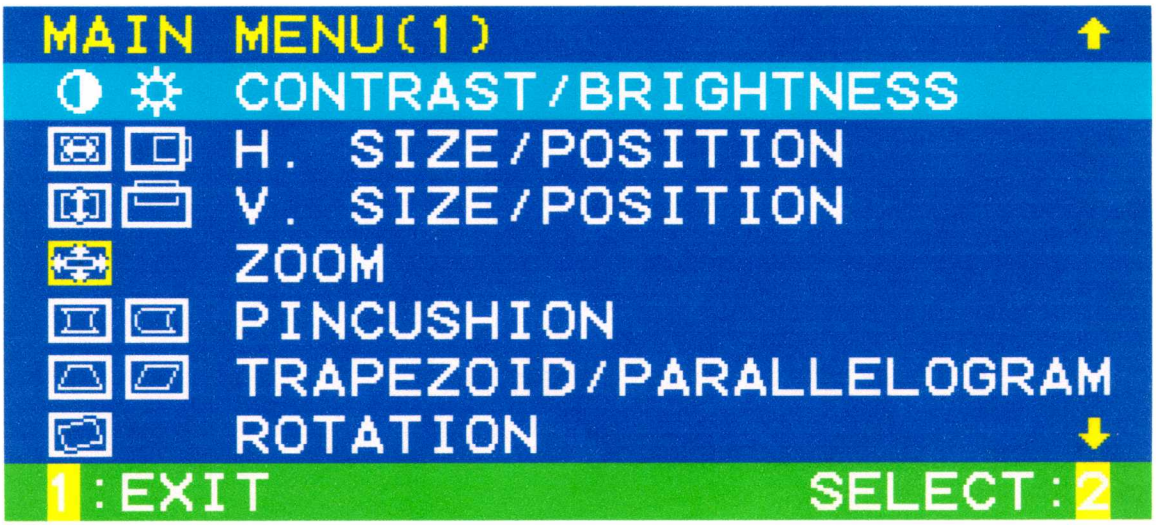


FIGURE 1 (USER MODE OSD MENU 1)

Using ▽ and △ keys moves a cyan window bar to your desired items. If it is selected, then pressing **"2"** key displays the Sub menu below to start the adjustment.

Use ▽ and △ to decrease / increase value on selected item. Noted pressing **"2"** allows adjustment of other item

To change to another adjustment, toggle.

In main menu (1), select "main menu" (1) and then pressing **"2"** key will display main menu (2) as below for other Adjustment options.

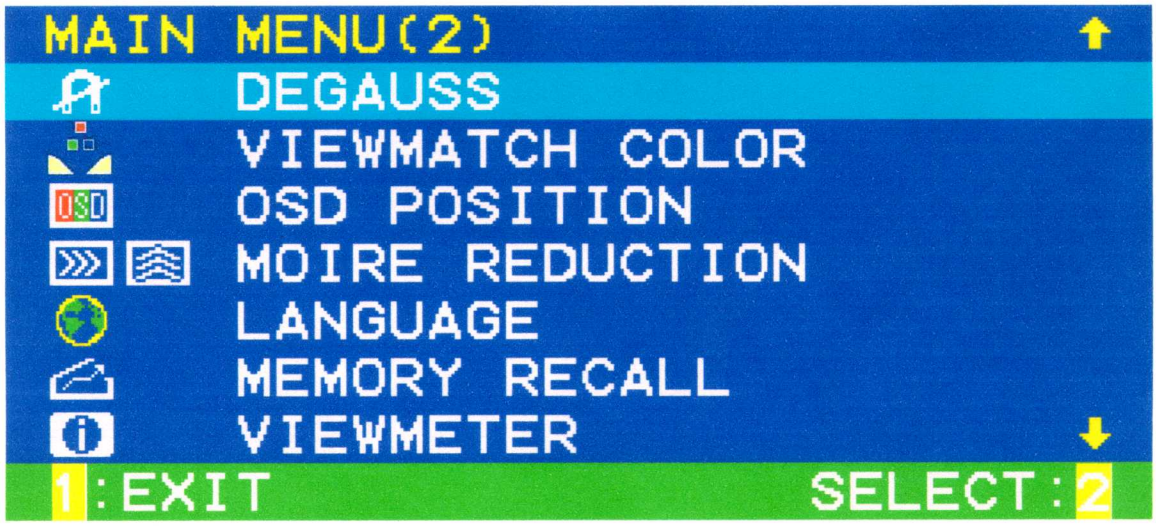
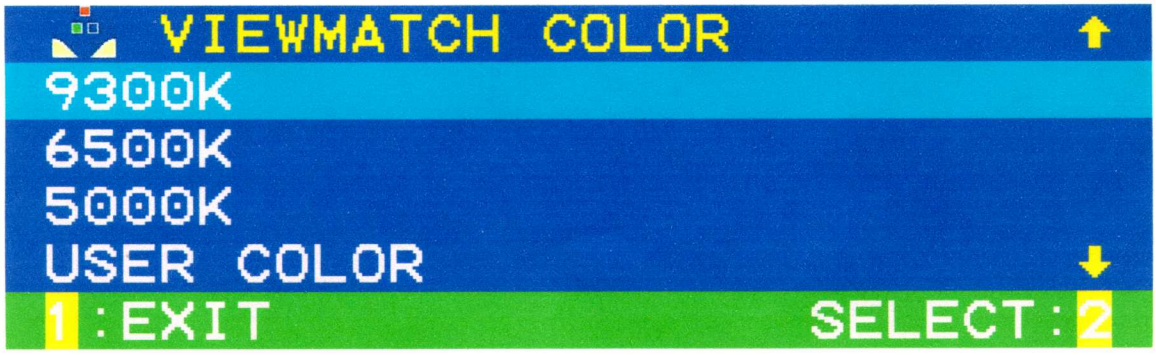


FIGURE 2 (USER MODE OSD MENU 2)

In main menu 2, if "VIEWMATCH COLOR" is selected, then pressing **"2"** key will display color sub menu.



The three default color modes such as 9300k, 6500k, 5000k can only be set in factory, that means, they can be displayed only in this menu.

If "user color" is selected, then pressing **"2"** key will display color adjustment sub menu as below:

In main menu(2), if "LANGUAGE" is selected, then pressing **"2"** key will display "LANGUAGE" sub menu.

If "VIEWMETER" is selected, and the "2" key is pressed the timing information sub menu is selected.

4. MECHANICAL PARTS & MECHANICAL ASSEMBLY

No.	Description	Part No.	VS#	Qty
M1	Front Cover (E90F)	5642285200	**C-FP-0301-0819**	1
	Front Cover (E90FB)	5642285202	**C-FP-0301-0820**	1
M2	Back Cover (E90F)	5642271018	**C-BC-0302-0368**	1
	Back Cover (E90FB)	5642271020	**C-BC-0302-0369**	1
M3	Power Key (E90F)	5642844700	**PL-BT-0706-0091**	1
	Power Key (E90FB)	5642844702	**PL-BT-0706-0092**	1
M4	Spring	5644210501	**M-MS-0808-7970**	1
M5	Power Light Pipe	5640327600	**M-MS-0808-7898**	1
M6	Function Key (E90F)	5642844800	**PL-FK-0709-0087**	1
	Function Key (E90FB)	5642844802	**PL-FK-0709-0088**	1
M7	Rubber Washer	5642020000	**M-MS-0808-7971**	4
M8	Main Chassis (E90F)	5648203507	**M-MS-0808-7348**	1
	Main Chassis (E90FB)	5648203509	**M-MS-0808-7366**	1
M9	Fastening Chassis	5642719000	**M-MS-0808-7972**	1
M10	Left Metal Bracket	5648729300	**M-MS-0808-7973**	1
M11	Right Metal Bracket	5648729400	**M-MS-0808-7974**	1
M12	FBT Clip	5642671901	**M-MS-0808-7975**	1
M13	PCB Support	5642670100	**M-MS-0808-7976**	1
M14	Clamp Signal Cable	5648002601	**M-MS-0808-7977**	1
M15	Tilt Frame (E90F)	5641406007	**M-MS-0808-7363**	1
	Tilt Frame (E90FB)	5641406009	**M-MS-0808-7365**	1
M16	Swivel Dish (E90F)	5641406107	**PL-TB-0717-0101**	1
	Swivel Dish (E90FB)	5641406109	**PL-TB-0717-0102**	1
M17	Base (E90F)	5641409600	**PL-PS-0715-0154**	1
	Base (E90FB)	5641409602	**PL-PS-0715-0149**	1
M18	USB Cover (E90F)	5642314900	**M-CV-0830-0257**	1
	USB Cover (E90FB)	5642314901	**M-CV-0830-0268**	1
M19	Foot Pad	5642022700	**PL-PD-0714-0057**	4
M20	Ring Cable	5648002601	**M-MS-0808-7978**	1
M21	Cover for CRT Drive Shield	5646246900	**M-CV-0830-0222**	1
M22	Drive CADR Shield plate	5646246301	**M-MS-0808-6646**	1
M23	Sponge	5642021705	**M-MS-0808-7979**	1
M24	Viewsonic Decorate	5642417700	**M-MS-0808-7575**	1
S1	Screw PHB+CW+RW M5x24	7190561001	**M-SCW-0824-0525**	4
S2	Screw PZP M4x10	7134251482	**M-SCW-0824-0523**	4
S3	Screw PZP M4x12	7134251652	**M-SCW-0824-0628**	5
S4	Screw BTBW M3x10	7000305022	**M-SCW-0824-0629**	3
S5	Screw C Pan M4x10	7001261412	**M-SCW-0824-0630**	1
S6	Screw PZP M4x14	7134251982	**M-SCW-0824-0524**	3
S7	Screw BRB M3x12	7033161652	**M-SCW-0824-0631**	1
S8	Screw PZP M4x20	7134252582	**M-SCW-0824-0632**	6

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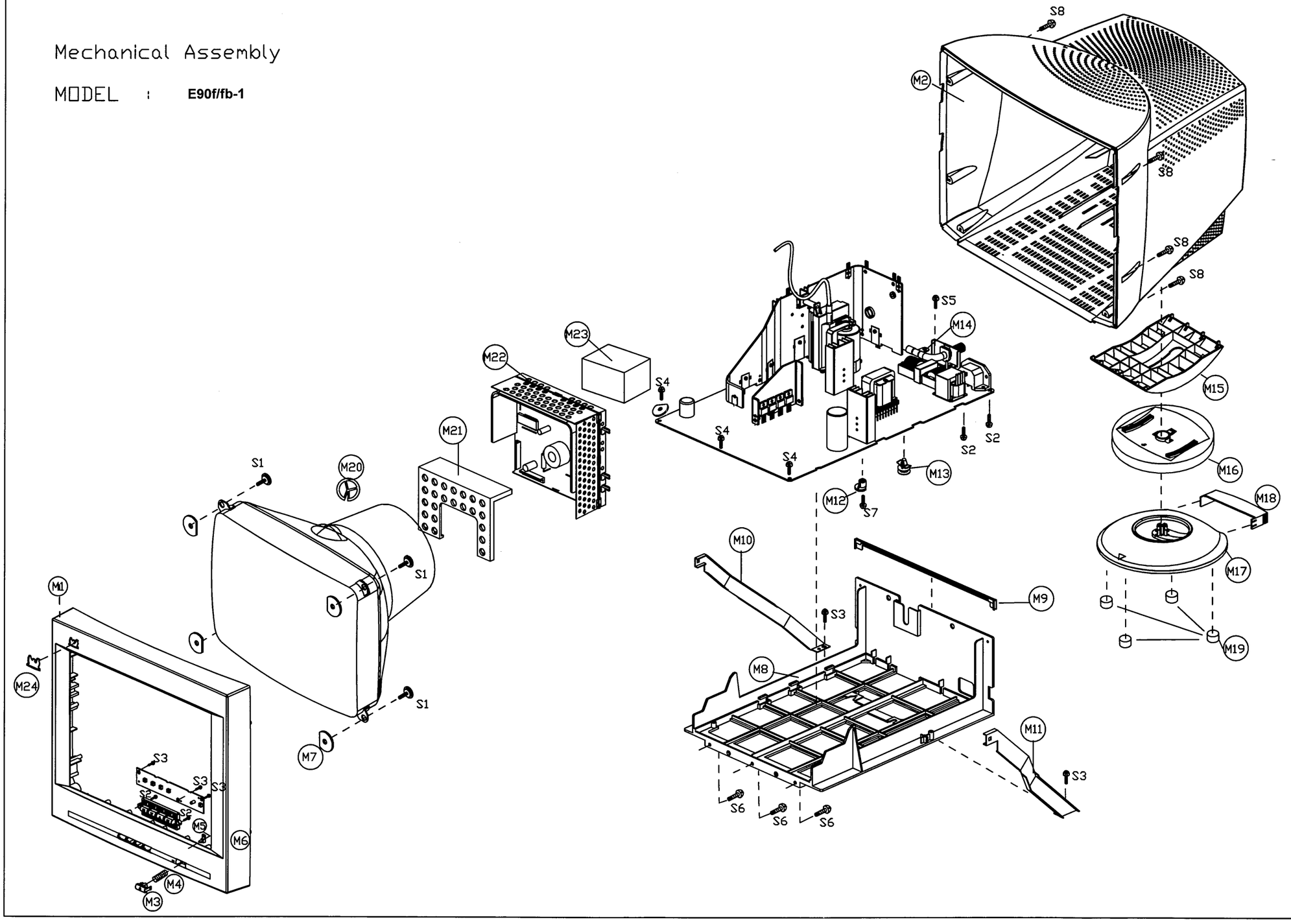
Mechanical Assembly

MODEL : **E90f/fb-1**



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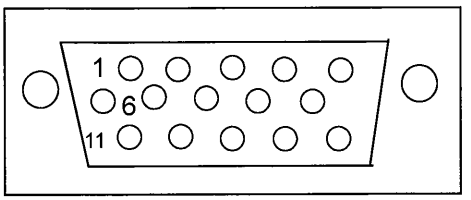
5.Pin Assignments & Connection

5-1.The Pin-assignments of the 15pin D-sub male miniature connector are shown below:



15 Pin Min D-sub male connector

PIN NO	PIN DESCRIPTION
1	RED
2	GREEN
3	BLUE
4	NO CONNECTION
5	GROUND
6	R-GROUND
7	G-GROUND
8	B-GROUND
9	+5V PC97
10	GROUND
11	NO CONNECTION
12	SDA FOR DDC
13	H.SYNC.
14	V.SYNC.
15	SCL FOR DDC

Connection

5-2 Monitor Installation

How to Install the Connections to your PC

1. Your monitor has two connection cables:

.A signal cable which connects to your computer's VGA connector. Which is colored blue.

2. To ensure your safety when connecting the cable, always follow these six steps:

( ) .Turn off the power to your computer and peripheral equipment.

( ). Position the monitor and computer so that you can easily access the rear panel of each unit.

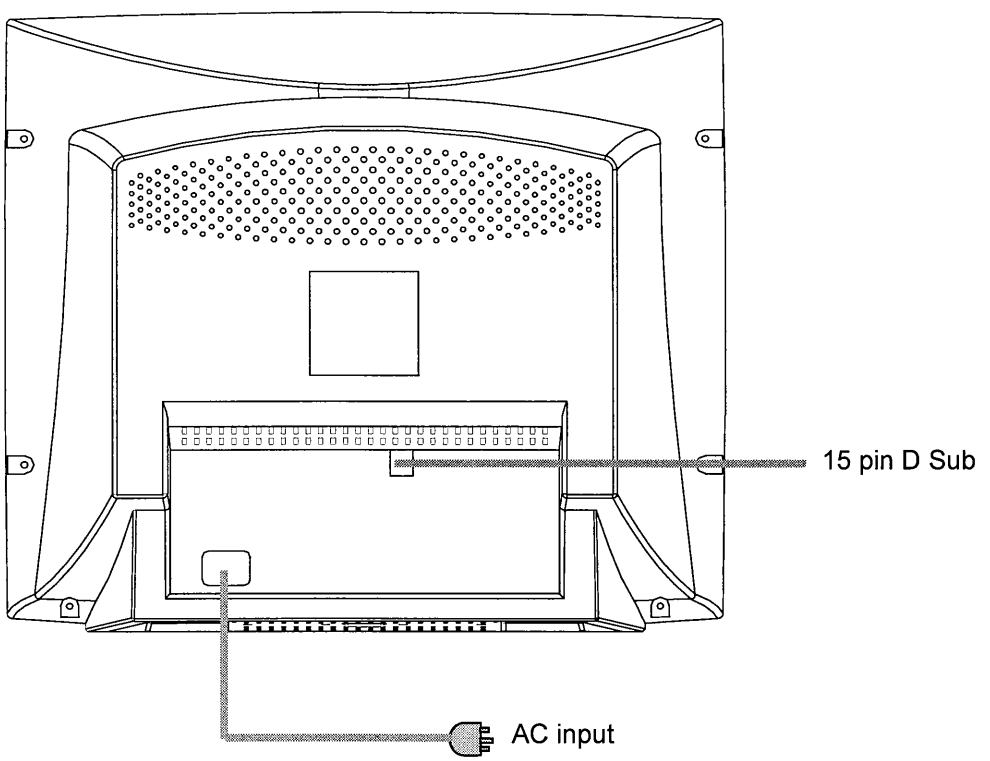
( ).Connect the blue-colored video signal cable D-sub connector to the signal connector on the graphics board (VGA connector) on your computer. (See your system user's guide for the exact location of your VGA connector.)

( ).Tighten the screws on the signal cable connector to prevent it from coming loose, and to prevent radio and TV interference.

( ).There are two kinds of Power Cord, one is to connect between your monitor and the wall outlet, the other type is to connect between your monitor and PC.

- You might have either of the above two type of power cord. To connect the power cord between monitor and PC, you have to plug one-end of the power cord to the monitor power input socket, and plug the other end of the power cord to the PC power output feed.

- To connect Power Cord between your monitor and wall outlet , you have to connect the power cord to the monitor power input socket on back of the monitor .Plug the other ent of the power cord into your surge protector or properly-grounded electrical outlet



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6.ELECTRONIC CIRCUIT DESCRIPTION

6-1 SWTCHING MODE POWER SUPPLY SECTION

6-1-1. Features

1. AC input: 100Vac – 240Vac.
2. When Power Saving activated, change feedback to reduce the output voltage and shut down Timebase and video circuit operation, thus reducing power to less than 3 W.

6-1-2. Circuit description:

6-1-2-1 EMI Noise Filter

6-1-2-2

C802 and C803 build as Y capacitors, C804 is X capacitor, L801 and L802 are Common Mode Choke, those build as a two steps Noise filter.

6-1-2-3 Power supply activation:

The rectified voltage across C809 charge C815 through R809, R810, R811, R812, Q810, and D822, When UC3842 pin 7 rise up to 14V, Q816 on and Q810 off. C817 charge to 55Vdc, this voltage is ready for B+ of UC3842at Pin7 during Suspend, or Off Mode(> 10V). C844 also provides a voltage for UVP (Vac under voltage protection). When C844 voltage is too low, Q814 turns off, voltage at pin 2 of UC3842 is over 2.5Vdc, UC3842 will be turned off and protected.

6-1-2-4 Degaussing circuit

Degaussing coil is connected to relay(SR801), and controlled by MCU through Q856 Q857, When power is turned on, SR801 close, and automatic demagnetization operate for a few seconds, then SR801 open. Degaussing also can be operated by pressing degaussing key on the front bezel.

6-1-2-5 UC3842 PWM controller

UC3842 is a current feedback PWM controller:
Pin1---is feedback positive end.
Pin2---190V and 9V at secondary side of power transformer provide a sampling voltage to pin 2 of UC3842 via I808, I807.
Pin3---is a current feedback input, when it is over 1V, no output at pin6 to drive output stage.
Pin4---This pin determine the operating frequency which is trig by a sync. signal coming from I810.
Pin6---this output drive power MOSFET(Q801).

6-1-2-6 Output voltage feedback control theory

Feedback control is sampled from 190Vdc and 9Vdc at secondary side, through VR R827 2.5V feedback to reference pin of I808(R), then I 807 coupled to pin 2 of UC3842. When output voltage rise up, I 808 Reference voltage(R) rise up too, Cathode(K) voltage goes down. More conduction on I807 in turns cause voltage across R826 to rise. UC3842 pin2 voltage rise to reduce the duty at output pin6. Q801 conduct less to reduce the secondary side voltages, thus to stabilize the DC voltages at secondary side.

6-1-2-7 Over-voltage protection

When output voltage is too High, voltage across C817 will be high and voltage drop on R872 is also high. It will force Q808, Q807 to conduct and pin8 of UC3842 to ground. Thus UC3842 stop to operate.

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6-1-2-8 Under-voltage protection

If AC input voltage is too low, voltage across C844 will be too low that force Q814 to turn off and voltage across C822 rise up. When pin2 of UC3842 rise up to 2.5V, pin6 stop to drive output. Thus Q801 is protected.

6-1-2-9 Synchronization circuit

That UC3842 working frequency is constant between 28.5 and 30.3 Khz can do that to adjust R817A..

6-1-2-10 Power Saving control

At normal operating state, Q811 on, Q812 off, output voltage are normal. At stand-by or suspend Mode, Q811 off, Q812 on, feedback voltage increase to reduce output voltages down to 1/3 of normal approx.. If enter off Mode, Q811 and Q812 Off, feedback voltage increase more to reduce output voltages down to 1/4 of normal. And the another great frequency control is to connect R821 to set power supply working at low frequency about 10 Khz. By above two ways, it can meet DPMS and NUTEK requirement.
When monitor enter power saving state, voltage across C817 controlled by I804, Q815 continue to supply pin 7 of UC3842 to operate and voltage across C811 controlled by Q805,Q806 continue to supply 5V for IA01 to stand by.

6-2 DIGITAL CONTROL CIRCUIT(Signal control by Microprocessor unit; IA01)

Horizontal and vertical sync. signal coming from CRT drive Board(PWB—0237)are fed into pin41(H. sync.) and pin42(V. sync.) of IA01.When the power cord plug in, pin4 of IA01 reset and IA01 start to check if the sync. Signals are exist at pin 41 and pin 42. The control tables are as follows:

Power state	Normal	Standby/suspend	Off
Pin42,Pin41	V sync. H. sync.	V or H. sync. exist	Both sync. not exist
Pin23	Logic high	Logic low	Logic low
I804	ON	OFF	OFF
Pin24(G)	High	High	Low
Pin22(A)	Low	High	High
LED	Green	Yellow	Amber

Standby/suspend Mode:
If only one of the sync signal exist, pin23 of IA01 change to low and turns off Q811 and pin21 of IA01 change to high and turns on Q812. The feedback will be reduced through I808 and cut down all the secondary output voltages. In order to maintain the supply voltage for I803 PWM, I804 is then turned on, Q815 turns on too. The supply voltage from D812 is then connected to Vcc of I803. The off signal from pin23 of IA01 also turns Q805, Q806 on, the supply voltage at input of I802 is then taken from D804 to keep 5V for IA01 continue working. In order to keep stand-by voltage for CRT heater, Q867 continue to conduct by the logic from pin21 of IA01.

Off mode:
When both sync. Signals are absent, IA01 will send a logic. Low at pin 23 and pin21 to turn Q811, Q812 off. The secondary voltages will be reduced further, and Q867, Q866 are turned off. The heater voltage

become zero for further lower power consumption than stand-by/suspend Mode.

Normal Power supply operation:

When the sync signals are both exist, then IA01 will send Low at pin 13 to switch on the relay BR801 via Q104 and Q104A and thus produce a very high current circulate the degaussing coil and this signal will sustain for a certain period. Thus the display is demagnetized

The sync signals are buffered by IA01 and output at pin 41, 42 to synchronize the timebase controller I301. IA01 will also initiate I301 by IIC bus build by pin 28(C.SCL), pin 27(C.SDA). This IIC bus is also responsible to initiate the video pre-amplifier I901and OSD I903. After the initiation is completed I301, I901 and I903 will operate normally.

Pin 17 to pin 20 provide the logic to control the horizontal CS linear correction circuit according to the horizontal frequency range as the following table.

IA01 o/p / H. freq.	Pin20 Cs0	Pin19 Cs1	Pin18 Cs2	Pin17 Cs3
FH < 32kHz	H	H	H	H
32kHz < FH ≤ 36kHz	H	L	H	H
36kHz < FH ≤ 40kHz	L	H	L	H
40kHz < FH ≤ 45kHz	H	H	H	L
45kHz < FH ≤ 52kHz	L	H	H	L
52kHz < FH ≤ 58kHz	L	L	H	L
58kHz < FH ≤ 65kHz	H	H	L	L
65kHz < FH ≤ 70kHz	L	H	L	L
70kHz < FH ≤ 83kHz	H	L	L	L
FH > 83kHz	L	L	L	L

Pin 36 (F/V) provides horizontal C linearity control.

Pin 40 provide rotation PWM to rotation circuit build by Q701, Q702 and Q703 and thus control the current circulate the coil around the deflection yoke to rotate the display.

Pin 31 short to ground via 15pin D sub connector when it connect to PC. When it is disconnected, power saving feature is switch off, monitor will display "NO SIGNAL" as self test pattern.

IA02 is E^2PROM for IA01 to save settings of all modes and DDC data.

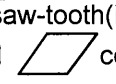
6-3 TIMEBASE CIRCUIT

6-3-1 TIMEBASE CONTROL (I301), HORIZONTAL

I301 is an IIC control Timebase processor, By IIC bus pin30,31(SDA,SCL) it can communicate with IA01(MCU)

H. sync., V. sync feed from IA01 pin41,42 to I301 pin1 ,2. When the H. Freq. is over 98kHz or below 28kHz, I301 will shut down to protect the Horiz. Output CKT from being damaged. The Horiz. Oscillator is build by C303 and R301 and determine the Horiz. Frequency range. C304, C305, R302 build up PLL 1 loop filter,

Via Icon, the IIC-bus allows a linear adjustment of the relative phase horizontal Sync. and oscillator saw-tooth(in PLL 1 loop)

and  correction of pin unbalance and parallelogram are done by modulating the phase between oscillator saw-tooth and horizontal. flyback (in loop PLL2)

The PLL2 phase detector is similar to PLL 1 detector and compares the Horiz. Flyback pulse at pin 12 with the oscillator saw-tooth wave-form. The controlled currents are independent of Horiz. Freq. The PLL 2 thus compensates for the delay in the output horizontal deflection CKT by adjusting the phase of the HDRV (pin26) output pulse.

6-3-2 HORIZONTAL OUTPUT STAGE

The Horiz. Drive Pulse output at pin 26 is pulled up to 12V to drive Q404 and then coupled via T401 to output transistor Q403 for on-off control. Thus saw-tooth current through Horiz. Deflection Yoke is obtained.

The function of C-correction is to correct the asymmetrical non-linearity of picture L402 and Horizontal. Yoke are in series for C-correction. Pin36 of IA01 provides a voltage which depends on Horizontal. Frequency. to control L402 via Q405, thus the inductance of L402 changes according to the Horizontal Frequency. to correct the linearity.

The function of S-correction is to correct the symmetrical non-linear distortion equidistant lines. C416,C423,C419,C420,C421 are S-correction capacitors, also they block the DC voltage to the Yoke. C416 is the fixed one , the others are controlled by IA01 via Q417,Q411,Q413,Q415 switches. When any switch turns on, the accordingly capacitor is in parallel with C416. The switches on-off depend on the Horizontal Frequency. They are:

Horiz. Freq.	C416 Fixed 0.24	C423 controlled by Q416 0.1(CS0)	C419 controlled by Q410 0.22(CS1)	C420 controlled by Q412 0.56(CS2)	C421 controlled by Q414 1.2(CS3)
> 83kHz	ON	OFF	OFF	OFF	OFF
70 < fh ≤ 83kHz	ON	ON	OFF	OFF	OFF
65 < fh ≤ 70kHz	ON	OFF	ON	OFF	OFF
58 < fh ≤ 65kHz	ON	ON	ON	OFF	OFF
52 < fh ≤ 58kHz	ON	OFF	OFF	ON	OFF
45 < fh ≤ 52kHz	ON	OFF	ON	ON	OFF
40 < fh ≤ 45kHz	ON	ON	ON	ON	OFF
36 < fh ≤ 40kHz	ON	OFF	ON	OFF	ON
32 < fh ≤ 36kHz	ON	OFF	ON	ON	ON
≤ 32 kHz	ON	ON	ON	ON	ON

6-3-3 SUPPLY VOLTAGE CONTROL FOR HORIZONTAL DEFLECTION

The B+ control function block is included in I301 which consists of an Operational Trans-conductance Amplifier , a voltage comparator, a flip-flop and a discharge circuit. Pin 28 of I301 is a drive voltage which consists of horizontal width, pincushion, trapezium and pin corner correction. This voltage is controlled by IA01 via IIC bus. The drive voltage feed into pin 15 (BIN) of I301 . The operation frequency of the B+ control block is the same as horizontal frequency. The B+ drive output of the control block is at pin 28(BDRV), this drive voltage switch Q402 on-off via a buffer build by Q400 and Q401. Q402 act as an step down DC converter to drive horizontal deflection output Q433 via L401. The width, pincushion, trapezium information are modulated on the DC converter by changing the duty of the B+ drive.

Moreover, the B+ duty is controlled with a charging circuit at same time. When the Q302 is OFF, the voltage at pin16 of I301 will linearly increase with a charge time of determining by R326 and C308 to modulate B+ duty.

Horizontal DC centering circuit is build by Q423,Q424. By controlling the small current flow in or out of L405, it will provide DC center compensation for CDT.

6-3-4 TIMEBASE CONTROL (I301), VERTICAL

The vertical free running frequency is determined by C312 (pin 22 of I301). The amplitude of the output at pin 23 can be adjusted via . Icon.

Icon provides a DC shift at the saw-tooth output at pin 23 and the EW drive output EWDRV(pin24) in such a way, that the whole picture moves vertically while maintaining the correct geometry.

The adjustments for vertical size and vertical position also affect the wave-forms of horizontal pincushion, vertical linearity, vertical linearity balance, focus parabola, pin unbalance and parallelogram correction. The result of this interaction is that no readjustment of these parameters is necessary after an adjustment of vertical picture size or position.

6-3-5 VERTICAL OUTPUT STAGE

The power amplifier driving the vertical yoke assembly is a DC design-based on power amplifier I310 TDA8172.

The vertical deflection coil is connected to pin5 of I330 via P401A. The saw-tooth signal is derived from Pin 23 of I301 and fed to pin1 of I310 via R306 / C322. The DC bias voltage is derived from pin13 of I301 and fed to pin7 of I310 via derived R325 / R327 to optimize the vertical position.

There are two supply voltage for I310, -15V is applied at pin4 via R384, +15V DC voltage is applied at pin2 and pin6 via D310 for the output stage during the retrace time. The supply voltage for the output stage during the retrace time is derived from the fly-back generator output on pin3 of I310 and applied through C388 to pin6.

6-4 HIGH VOLTAGE GENERATOR AND BLANKING CIRCUIT

I101 is a current mode PWM controller which provide the drive signal for high voltage generator. It is synchronized by horizontal blanking signal coming from deflection circuit via Q111. Q121,Q124 are high voltage output switches. T101 provide the high voltage(26.5kV) to CDT anode. Pin 13 provide feedback to pin2 of I101 to control the duty when high voltage is varied according to the beam current. Thus it gives a very good high voltage and size regulation. A very precise geometry distortion is achieved. R176 provides high voltage adjustment.

Pin5 of T101 sense high voltage for OVP protect. When high voltage is over 33kV, it raises the emitter voltage of Q114. When emitter voltage of Q114 is 6.8V higher than Q115 collector, Q116 start to conduct and shutdown the PWM(I101) by reducing the voltage at pin1. This is also called X-Ray protection . R137 set the protection point.

Pin 8 of FBT sense the beam current. When beam current rise, base voltage of Q126 drop and so the emitter does. The voltage across C108 drops to pull down the voltage at pin17 of I501. When the voltage at pin 17 of I501 drops under 6V, contrast of display start to decrease. R167 set the light output where the contrast (or full white screen light output) start to drop. If the beam current is too high, Q118 will conduct and shutdown PWM controller (I101).

Pin 7 of FBT provide negative bias for Grid 1 of CDT :

Pin5 of I310 provide vertical blanking to base of Q108 via D113. Q108 collector pulse drops 63V to give a proper blanking level at Grid 1 of CDT. When monitor turns off, pin3 (HUNLOCK) is pull high to turn off

Q108 via D108. Grid 1 of CDT is then pulled down to most negative voltage from pin7 of FBT to protect CDT. This action is so-called spot killer.

6-5 Dynamic focus circuit

The vertical dynamic focus is from pin 32 of I301 and feed to base of Q105 via R105 and C103. The horizontal dynamic focus is taken between L402 and Horizontal S correction capacitors. It is step up(amplified) to the certain level voltage (600V approx. at 94kHz Timing Mode) and combine with Vertical dynamic focus waveform through L403, and then feed to PIN 11 of FBT. The dual trace parabola wave-form plus the DC focus voltage gives sharp and clear display for the whole screen.

The two variable resistors on top of FBT provide focus setting.

The bottom one set Grid 2 voltage of CDT

.

6-6 Video and CDT drive circuit

6-6-1 VIDEO PREAMPLIFIER (I501)

The signals come from PC through P901 to CDT drive board (PWB-0237). Pin7(Red),pin5(Green), pin3(Blue) feed to pin11, 6,2 of I901(video pre-amplifier). Pin 4, 9, 13 of I901 are OSD R, G, B video signals input coming from OSD IC I503. Pin 12 of I901 is the input for OSD blanking signal which blank the normal video as OSD video signal is active. Since the video inputs are AC coupled to I901, so I901 need a clamping signal (at pin 19) from H. sync (IA01 pin 34) to give DC restoring at I901 outputs. The horizontal blanking signal is provided from PWB-0235. Via P902A, it connects to pin 27 of I901. The video outputs of I901 will have the level darker than the video black level during the horizontal retrace time. Pin 20 and 21are IIC input for MCU(IA01) to control video. By IIC bus MCU will initiate I901 and control the contrast, brightness, R/G/B gain, and R/G/B bias.
Pin15 is an ABL control input. By detecting the beam current, it will reduce the contrast when the beam current exceed the setting point.

6-6-2 VIDEO DRIVE AND OUTPUT CIRCUITS

After being pre-amplified, the R. G. B. video signals are output from pin35, pin32, and pin29 of I901 respectively. The amplitude of the signal at theses output are about 3 ~ 4 V p-p. Those video signals are connected the I904 at pin 7, 6, 9 respectively.

The I904 is video output amplifier to amplify the R, G, and B signal. They offer about 40 V p-p signal in amplitude to drive the cathodes of CRT.

L912, L942, L972, are the peaking coils, for the compensation of high frequency response.

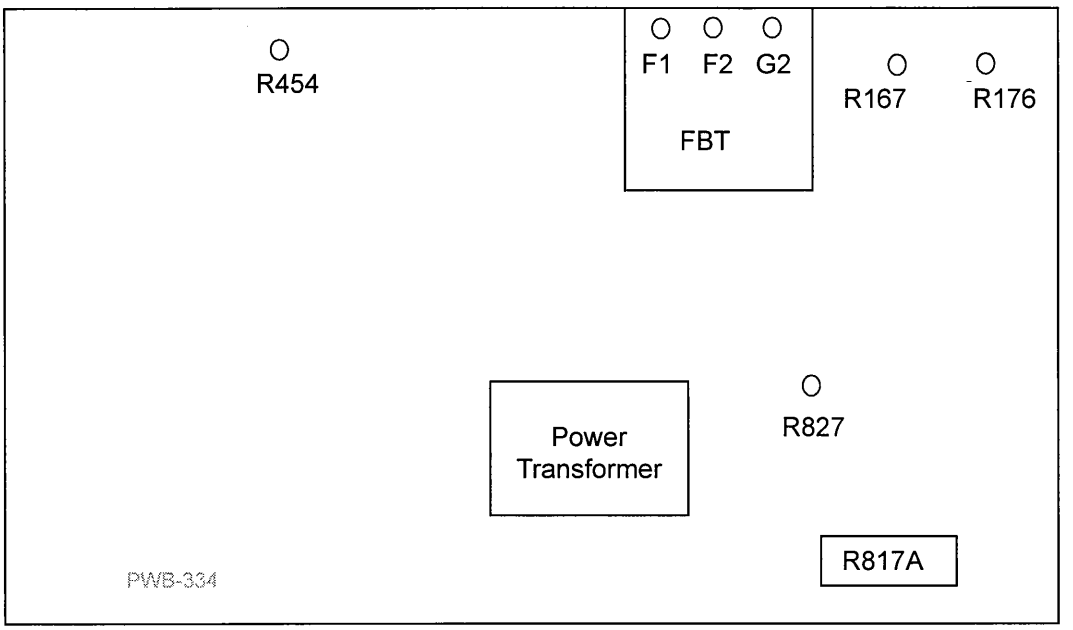
The DC off-set bias voltage is set up by R902, R903 at pin30 of I901.

The cathode cut-off setting voltages required for white balance are obtained from pin23(r), pin25 (g), pin26 (b) respectively, These output magnitude can control the conduction of transistors Q903, Q933, Q963 individually. The DC bias of the cathodes are then varied to optimize the color temperature of back ground.

Brightness control : Pin 2 of IA01 provides Brightness control. It feed through P903 to base of Q960 to vary R, G, B bias at cathodes simultaneously.

7. ADJUSTMENT

The adjustment data with tolerance is only for setting to the optimum performance.
SERVICE ADJUSTMENT LOCATIONS
Main Board (parts side view)---PWB-0334



F1--------Variable Resistor on top of FBT for Static Focus adjust.
F2--------Variable Resistor on middle of FBT for Dynamic Focus adjust.
G2--------Variable resistor on bottom of FBT for Grid 2 set up.
R167-----Full white brightness adjust.
R176-----High voltage setting
R454-----Raster center
R827-----B+ = 81V setting
R817A---Set power supply working frequency
Degauss--------To degauss function
Enter key----------Enter OSD key
Down key----------Decrease adjust value or counterclockwise select Icon
Up key----------Increase adjust value or clockwise select Icon

7-1 B+ (81V) output voltage adjustment
a).Apply PC signal with any pattern to the monitor.
b).Connect AC input and power on the monitor.
c).Brightness at center, contrast at maximum.
d).Adjust R827 for the voltage at heat-sink of D816 to 81V

7-2 High voltage

a).Apply PC signal with 31.47kHz / 60Hz(640 x 480) Mode and full white pattern to the monitor.

b).Connect AC input and power on the monitor.

c).Brightness at center, contrast at maximum.

d).Adjust R176 for Normal high voltage = 26.2kV

7-3 Full brightness setting (Timing Mode 10)

a).Apply PC signals with full white pattern to the monitor.

b).Connect AC input and power on the monitor.

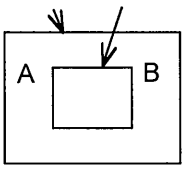
c).Brightness at center, contrast at maximum.

d).Adjust proper Horizontal and vertical size.

e).Set R, G, B bias and Gain (follow color temp. adjustment procedure)

f).Adjust R167 to get 30FL.+/- 1FL

7-4 OSD Adjustment (See the table below)(Enter OSD Menu) : Turn on the monitor by pressing power switch and OSD on/off key at the same time, release power switch and continue to press enter key, then release the enter key until display appears.

Item	Adjustment Description	SPEC.
(1) Horizontal Raster Center	* Mode : Mode 14(1280x 1024 @75Hz) * Pattern : Black (Background) * Brightness : Raster visible * Adjust R454 for raster position	BEZEL RASTER  |A-B|=0.5—1mm
(2) Vert. Linearity C Correction Adjustment	* Mode : Mode 10(1024 x 768 @ 75Hz) * Pattern : 8 x 6 Crosshatch * Brightness : Center * Contrast : Max * Open OSD , enter "FS" and select "LB" Adjust until square height of top is equal to bottom	$\frac{Ymax - Ymin}{Ymax + Ymin}$ <= 4%
S Correction Adjustment	* Open OSD , enter " " and select " " Adjust until square height of top and bottom are equal to center.	
(3)Horizontal. Width Adj. (Every Mode) 	*Pattern: Crosshatch *Brightness: Center. Contrast: Max. *Enter Pre-set Mode *Select Horizontal Width Icon. *Press UP/DOWN to get 352mm	352±3 mm (Every Mode)

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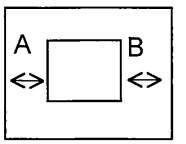
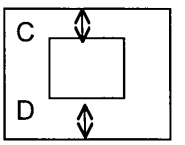
Item	Adjustment Description	SPEC.
(4) Horizontal Phase Adj. (Every Mode) 	*Pattern: Crosshatch *Brightness: Center. Contrast: Max. *Select Horizontal Phase Icon. * Press UP/DOWN to center display.	 |A-B| <= 2mm (Every Mode)
(5) Vertical Height Adj. (Every Mode) 	*Pattern: Crosshatch *Brightness: Center. Contrast: Max. *Select Vertical Height Icon. *Press UP/DOWN to obtain 264mm	264±3mm (Every Mode)
(6) Vertical center Adj. (Every Mode) 	*Pattern: Crosshatch *Brightness: Center. Contrast: Max. *Select Vertical Center Icon. * Press UP/DOWN to center display.	 |C-D| <= 2 mm
(7) Rotation Adj. 	*Pattern: Crosshatch *Brightness: Center. Contrast: Max. *Select Rotation Icon. * Press UP/DOWN to rotate the display to the best..	Only adjust Mode 14
(8) Geometric Adj.	*Pattern: Crosshatch *Brightness: Center. Contrast: Max.	Right & Left<=2.0mm Top & Bottom<=2.0mm Barrel<=1.5mm Using window Horizontal.: Within 2.0mm window Vertical.: Within 2.0mm window (Every Mode)
(a)Pin–balance. (Every Mode) 	*Pin–balance Adj.: Select Pin-balance Icon Press UP OR DOWN Key to correct the Bow distortion to the best.	
(b)Parallelogram (Every Mode) 	*Parallelogram Adj.: Select Parallelogram Icon Press UP OR DOWN Key. to correct the Orthogonality to the best.	
(c)Pincushion Adj. (Every Mode) 	*Pincushion Adj.: Select Pincushion Icon Press UP OR DOWN Key, to straighten Side Pincushion.	

Item	Adjustment Description	SPEC.
(d)Trapezium Adj. (Every Mode) (e)Pin–corner Adj. (Mode 11) 	*Trapezium Adj.: Select Keystone Icon Press UP OR DOWN Key, to make picture geometric distortion the best. *Pin–corner Adjustment: Select Pin-corner Icon Press UP OR DOWN Key, to make picture geometric distortion the best. (Note this Adj. Item is used to correct the four corners in a small quantity)	Pin distortion < 1.0mm Left / right <1.5mm < 0.5mm in 50 mm LINE
(9).Contrast 	*Standard pre-set setting is Contrast adjust to the maximum.	NC
(10)Color Temperature. Adjustment <a>.9300°K bias Adj.	*Enter preset OSD menu. *Mode 14: 1280 x 1024 Pattern : 11(Black pattern) *Brightness : set at 180.. Contrast : Max.. *Select color Adj. Icon. Select 9300°K first. The R,G,B bias initial setting should be in the middle. Adj the screen VR on FBT to get 0.7+/-0.1FL *Adj. R,G,B bias until x = 0.283+/- 0.006 y = 0.297+/-0.006 Y =0.7 +/- 0.1 Ft/L	x=0.283+/-0,01 y=0.297+/-0.01 Y=0.7+/-0.1Ft/L

Item	Adjustment Description	SPEC.
<b>.6500°K bias 5000°K bias ADJ	*Enter preset OSD menu. *Mode 14 : 1280 x 1024 Pattern : 11(Black pattern) * Brightness: set at 180.. Contrast : Max.. *Select color Adj. Icon. Select 5000°K , 6500°K first The R,G,B bias initial setting should be in the middle. *Adj. R,G,B bias until x =0.313+/-0.006 y =0.329+/-0.006 (6500°K) Y =0.7 +/- 0.1Ft/L x =0.346+/-0.006 y=0.359+/-0.006(5000°K) Y =0.7 +/- 0.1Ft/L	NC
(9).Brightness	*Color temperature bias shall be adjusted. *Enter preset OSD menu. *Adjust brightness down to 0.06+/-0.01FL. *Power off Monitor , then power on again to check Brightness should be at 50% in User's OSD menu.	NC
<c>.9300°K Gain Adj.	*Enter preset OSD menu *Mode 14 : 1280 x 1024 *Pattern : 70mm x 70mm White block. *Brightness : 0.06FL(background) *Contrast : Max.. *Select color Adj. Icon. *Select 9300°K firstly *Disable R,B signal; only Green signal left. *Adjust Green Gain to get 28FL around *Adj. R,B Gain until x=0.283+/-0.006 y=0.297+/-0.006 Y 38.5(CPT)/40 (SAMSUNG)Ft/L	x =0.283±0.01 y =0.297±0.01 Y >= 38 Ft/L

<d>.6500°K Gain 5000°K Gain ADJ	*Enter preset OSD menu *Mode 14: 1280 x 1024 *Pattern : 70mm x 70mm White block. *Brightness : 0.06FL, Contrast : Max. *Select color Adj. Icon. *Select 6550°K *Disable R,B signal; only Green signal left. *Adjust Green Gain to get 28FL around *Adj. R,B Gain until x =0.313+/-0.015 ,y =0.329 +/-0.015(6500°K) x =0.346+/-0.015 ,y =0.359 +/-0.015(5000°K) Y 38.5(CPT)/40 (SAMSUNG)Ft/L	 x =0.313+/-0.01 y =0.329+/-0.01 x=0.346+/-0.01 y =0.359+/-0.01 Y >= 38 Ft/L

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Item	Adjustment Description	SPEC.
ABL setup	*Mode 14 : 1280 x 1024 *Brightness: 0.06FL Contrast: Max. *Pattern : Pattern 41 (Full white) *Adjust VR(R167) to get 30± 1Ft/L	≥ 30Ft/L
(12).Focus adjustment	*Mode 14 : 1280 x 1024 *Pattern : Compaq me Pattern. Compaq me Pattern. reverse. *Brightness: 0.06FL. Contrast: Max. *Adj. Focus VRS on FBT until full screen focus to the best.	Both pattern" me " and its' reverse Patterns should be easy to distinguish
(13).Convergence adjustment	*Mode 14 : 1280 x 1024 *Pattern: Crosshatch pattern *Brightness :center Contrast : 30Ft/L *4 & 6 Pole magnet adjusted to get optimized convergence, the criteria is: 350 x 262 mm Area: < or = 0.3mm Remaining area: < or = 0.4mm	Center :<=0.15 mm Circle :<=0.30 mm Rectangle :<=0.40 mm

8. TIMING CHARTS

Factory preset Timing :15 Mode

MODE	RESOLUTION H X V NO.	H.FREQ (kHz) V.FREQ(Hz)	H. POLARTY V.	HORIZ. TOTAL USEC	H. DISPLAY USEC	H.BACK PORCH USEC	H.SYNC WIDTH USEC	VERT. TOTAL: MSEC	V.DIS--PLAY MSEC	V.BACK PORCH MSEC	V.SYNC WIDTH MSEC	VIDEO RATE MHz
VGA	640 X 480 1	31.469 59.94	– –	31.778	25.422	1.907	3.813	16.683	15.253	1.049	0.064	25.175
VGA	640 X 400 2	31.469 70.078	- +	31.779	25.422	1.907	3.813	14.269	12.712	1.112	0.064	25.175
MAC	640X480 3	35.0 66.667	Composite Negative	28.571	21.164	3.175	2.116	15	13.714	1.114	0.086	30.24
	640X480 4	37.5 75	– –	26.667	20.317	3.81	2.032	13.333	12.8	0.427	0.080	31.5
VESA 60Hz	800X600 5	37.8 60	+ +	26.4	20	2.2	3.2	16.579	15.84	0.607	0.106	40
VESA 85Hz	640 X 480 6	43.269 85.008	– –	23.111	17.778	2.222	1.556	11.764	11.093	0.578	0.069	36
VESA 75Hz	800 X 600 7	46.875 75	+ +	21.333	16.162	3.232	1.616	13.333	12.8	0.448	0.064	49.5
MAC	832X 624 8	49.725 74.5	– –	20.111	14.524	3.910	1.117	13.414	12.549	0.784	0.06	57.28
	800 X 600 9	53.674 85.061	+ +	18.631	14.222	2.702	1.138	11.756	11.179	0.503	0.056	56.25
VESA 75Hz	1024 X 768 10	60.023 75.029	+ +	16.660	13.003	2.235	1.219	13.328	12.795	0.466	0.050	78.75
	1024 X 768 11	60.241 74.927	– –	16.6	12.8	2.2	1.2	13.346	12.749	0.498	0.05	80
VESA 85Hz	1024 X 768 12	68.677 84.997	+ +	14.561	10.836	2.201	1.016	11.765	11.183	0.524	0.044	94.5
	1600 X 1200 13	75.0 60	+ +	13.333	9.877	1.877	1.185	16.667	16	0.613	0.04	162
VESA 75Hz	1280 X 1024 14	79.976 75.025	+ +	12.504	9.481	1.837	1.067	13.329	12.804	0.475	0.038	135
VESA	1024X768 15	48.363 60.004	– –	20.677	15.754	2.462	2.092	16.666	15.880	0.600	0.124	65

-

9. AUTOMATIC POWER SAVING

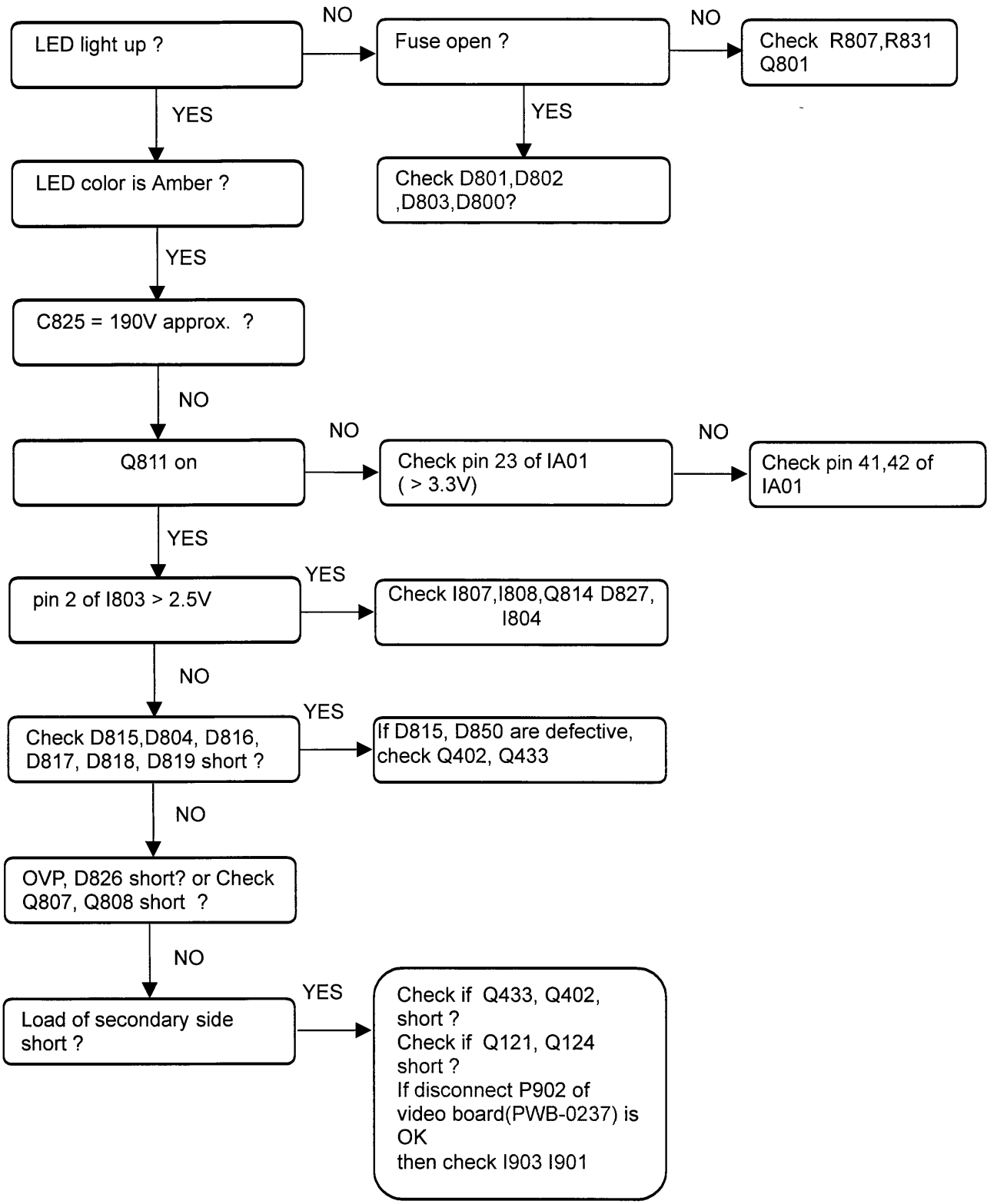
Power Management

Complies with VESA DPMS , NUTEK and EPA requirements.

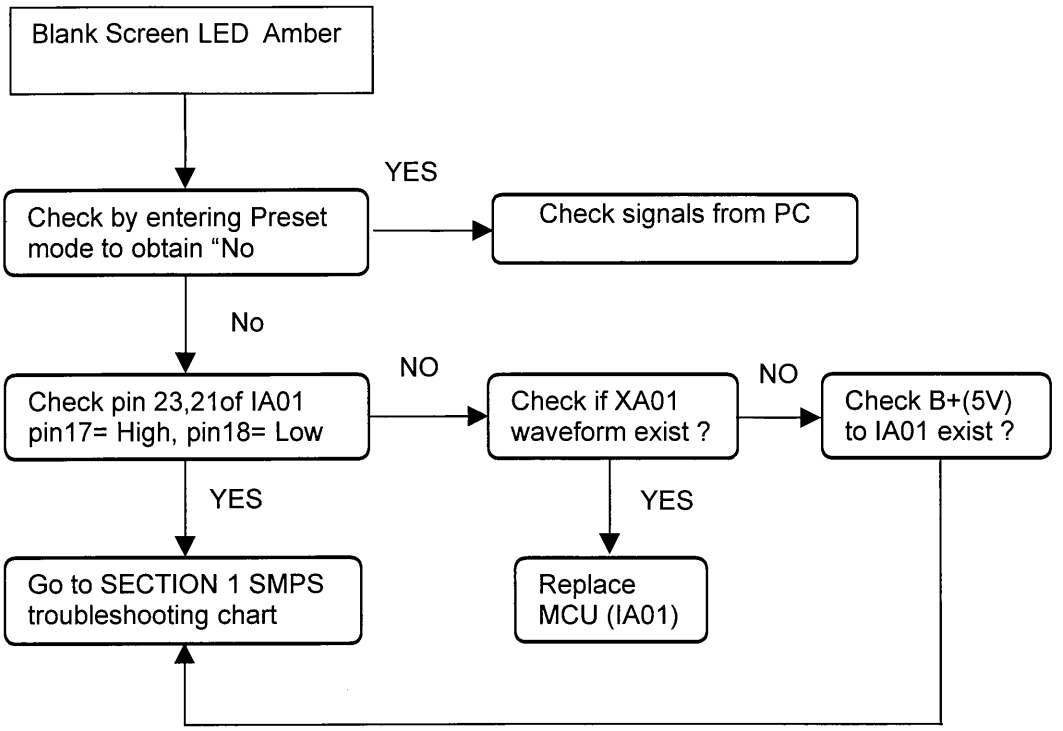
	POWER (WATTS)	LED INDICATOR		
NORMAL	<120 W	Green		
STAND-BY	<3.1 W	Amber		
SUSPEND	<3.1 W	Amber		
OFF	<3.1 W	Amber		

10.TROUBLE SHOOTING FLOW CHART

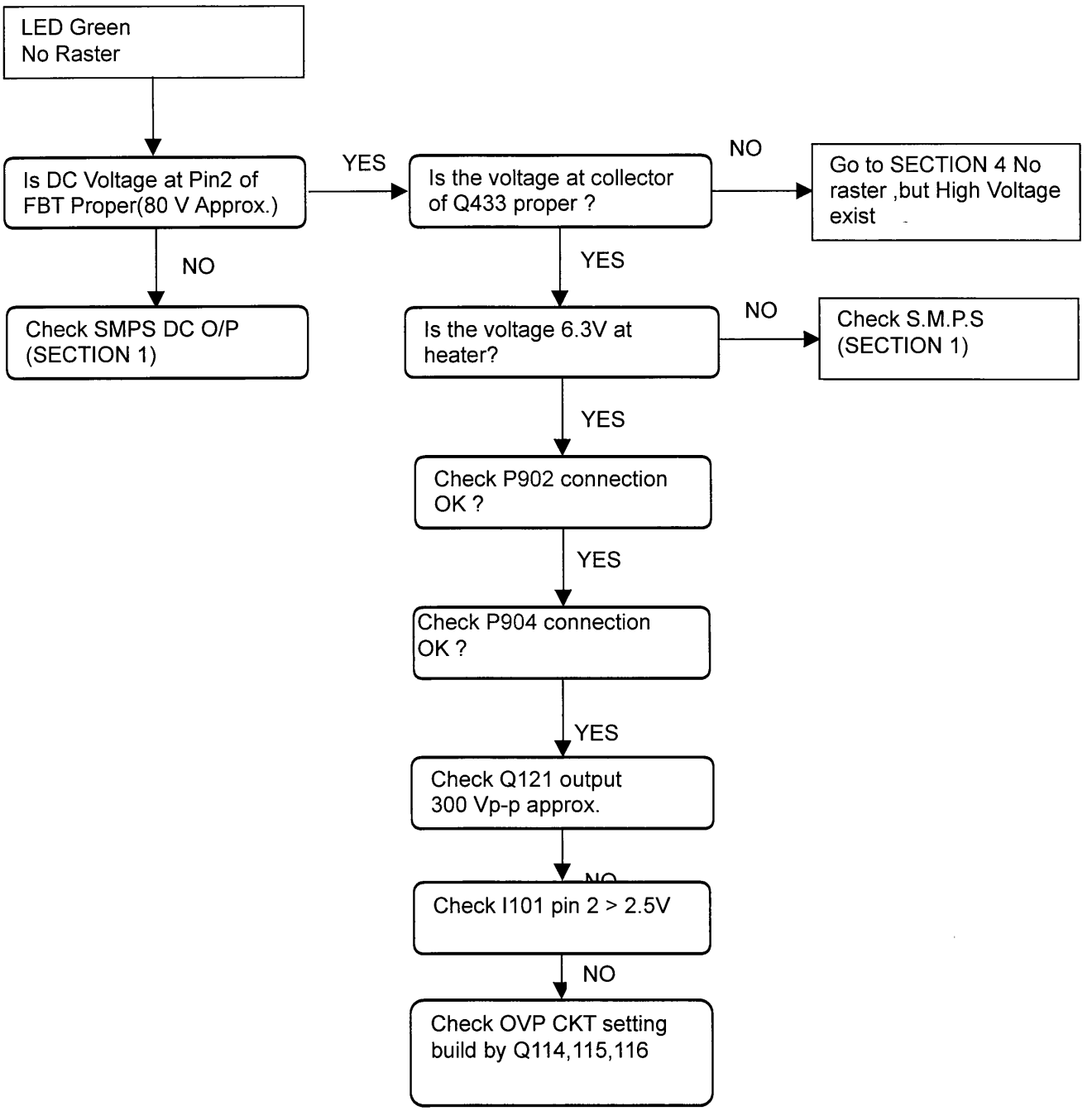
SECTION 1 Q811 on, Q812 off

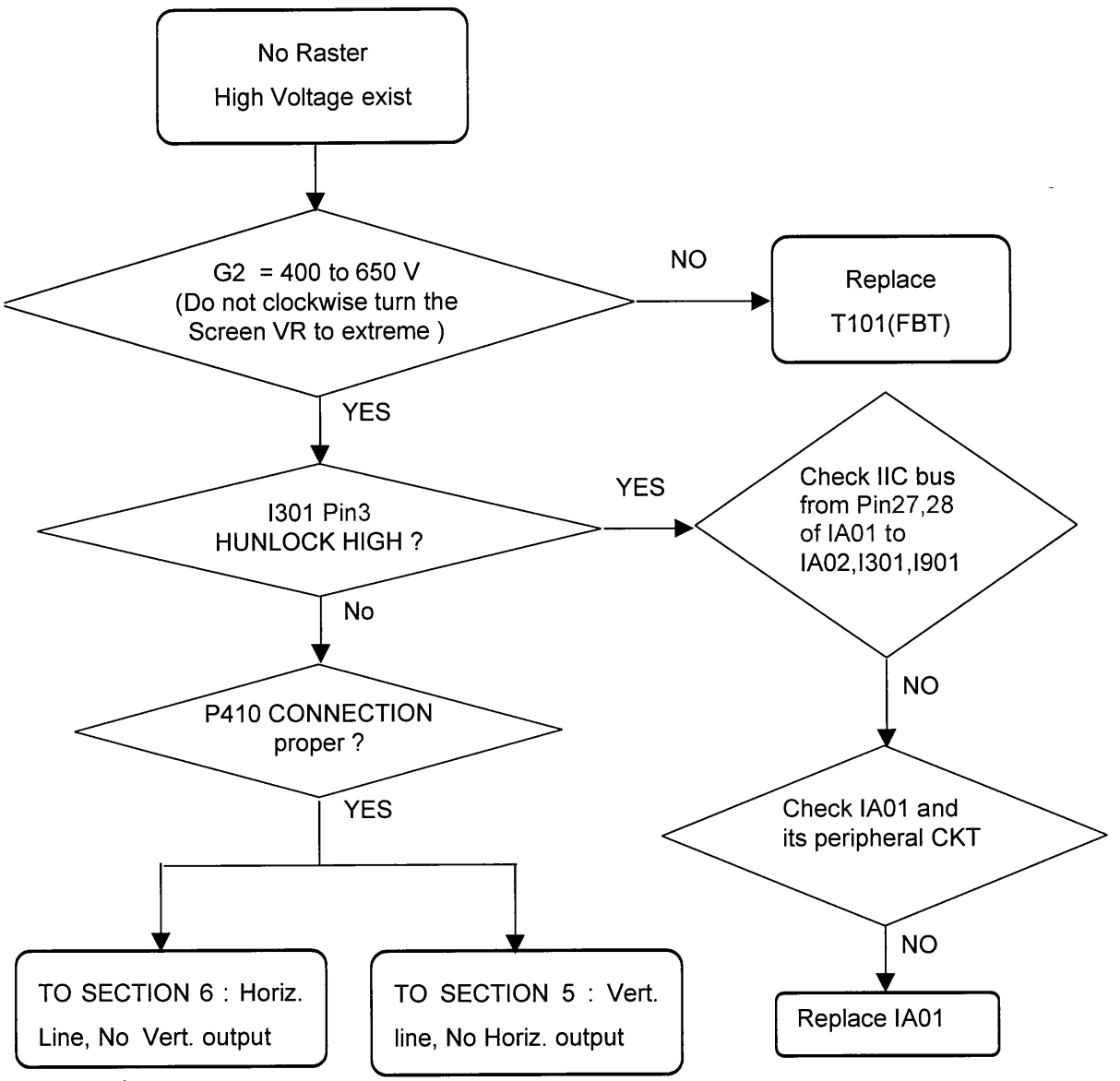


SECTION 2

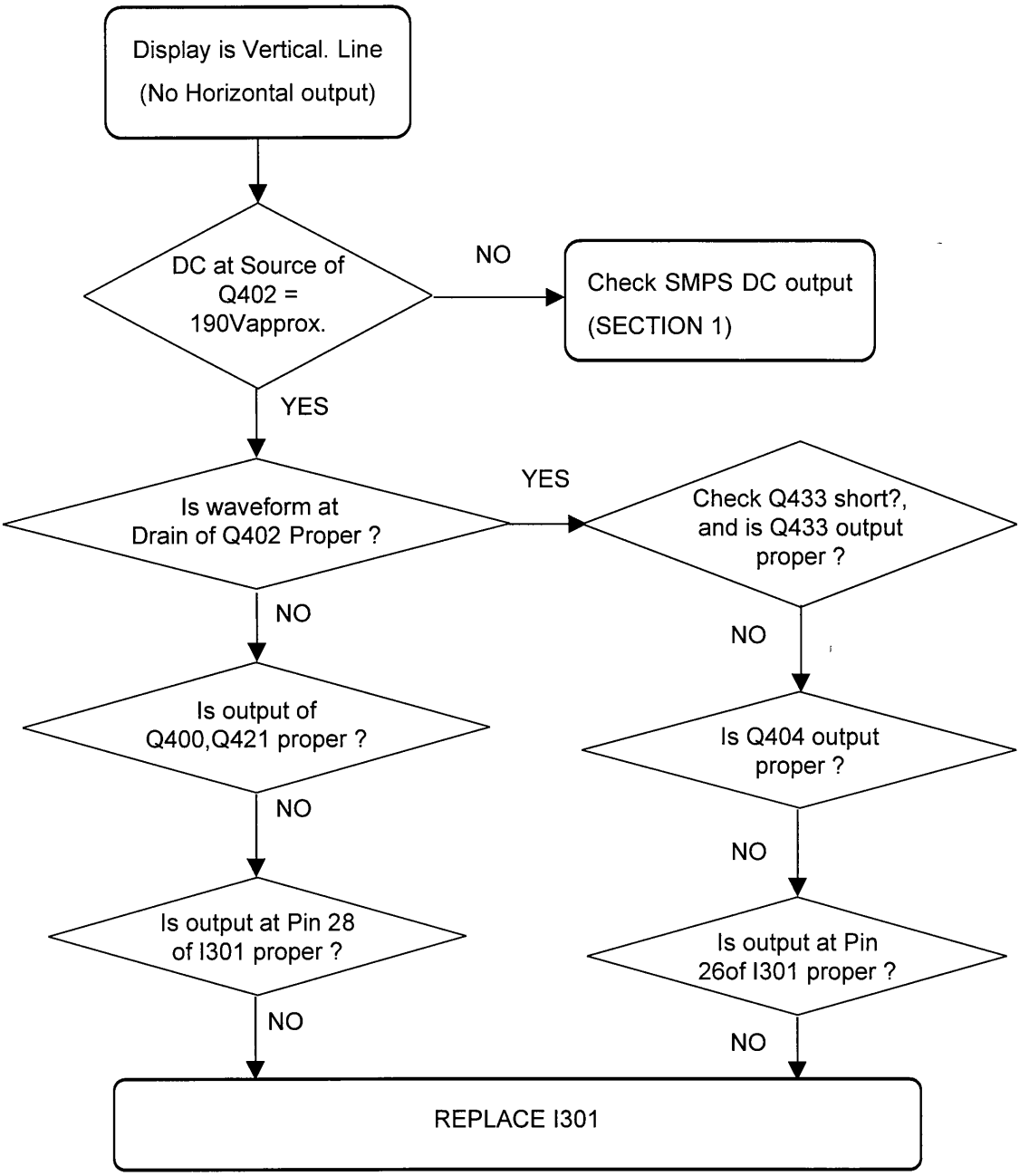

Blank Screen LED Amber
YES
Check by entering Preset mode to obtain "No
Check signals from PC
No
NO
NO
Check pin 23,21of IA01 pin17= High, pin18= Low
Check if XA01 waveform exist ?
Check B+(5V) to IA01 exist ?
YES
YES
Go to SECTION 1 SMPS troubleshooting chart
Replace MCU (IA01)

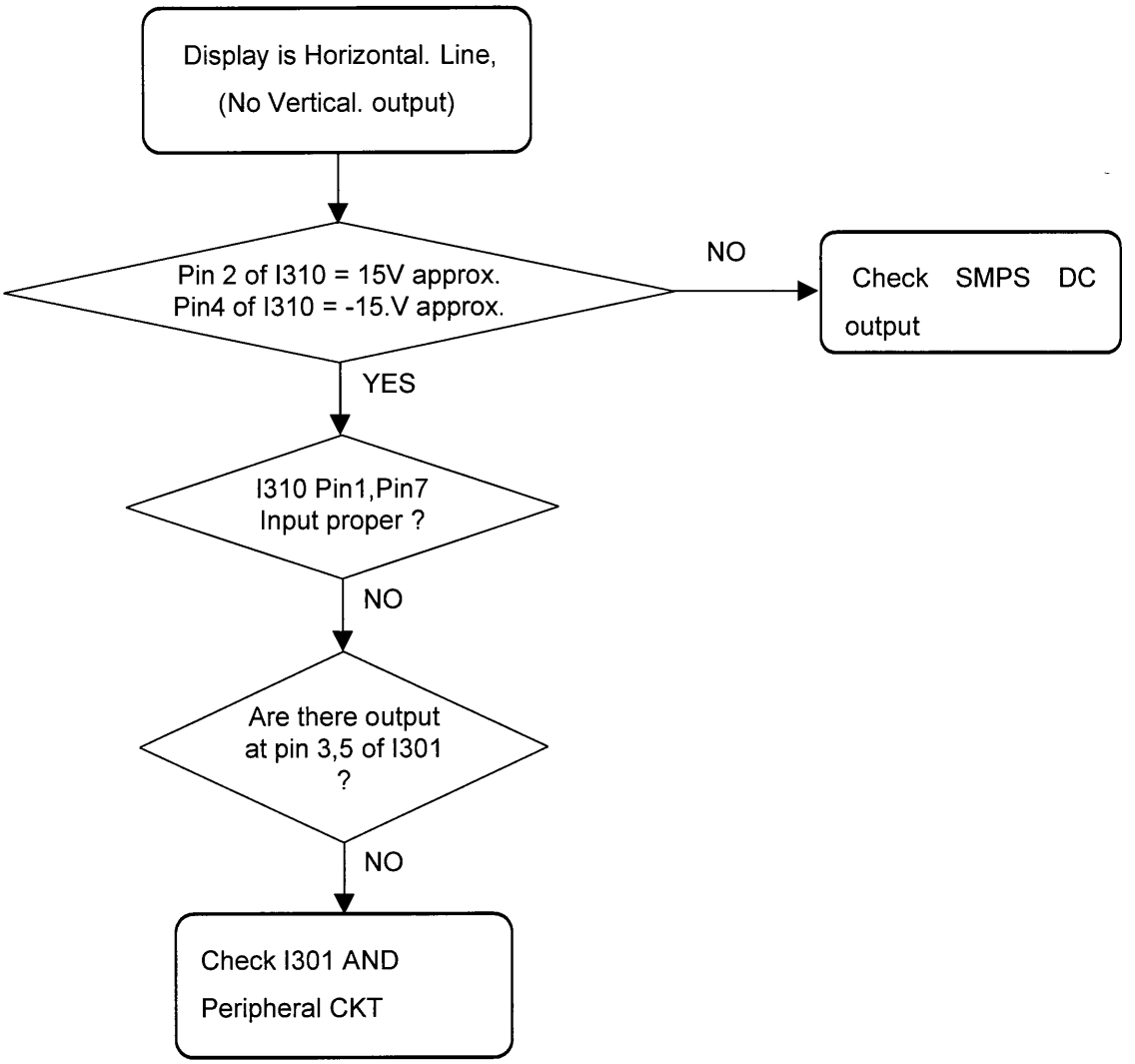
SECTION 3


LED Green
No Raster
Is DC Voltage at Pin2 of FBT Proper(80 V Approx.)
YES
Is the voltage at collector of Q433 proper ?
NO
Go to SECTION 4 No raster ,but High Voltage exist
NO
Check SMPS DC O/P (SECTION 1)
YES
Is the voltage 6.3V at heater?
NO
Check S.M.P.S (SECTION 1)
YES
Check P902 connection OK ?
YES
Check P904 connection OK ?
YES
Check Q121 output 300 Vp-p approx.
Check I101 pin 2 > 2.5V
NO
Check OVP CKT setting build by Q114,115,116

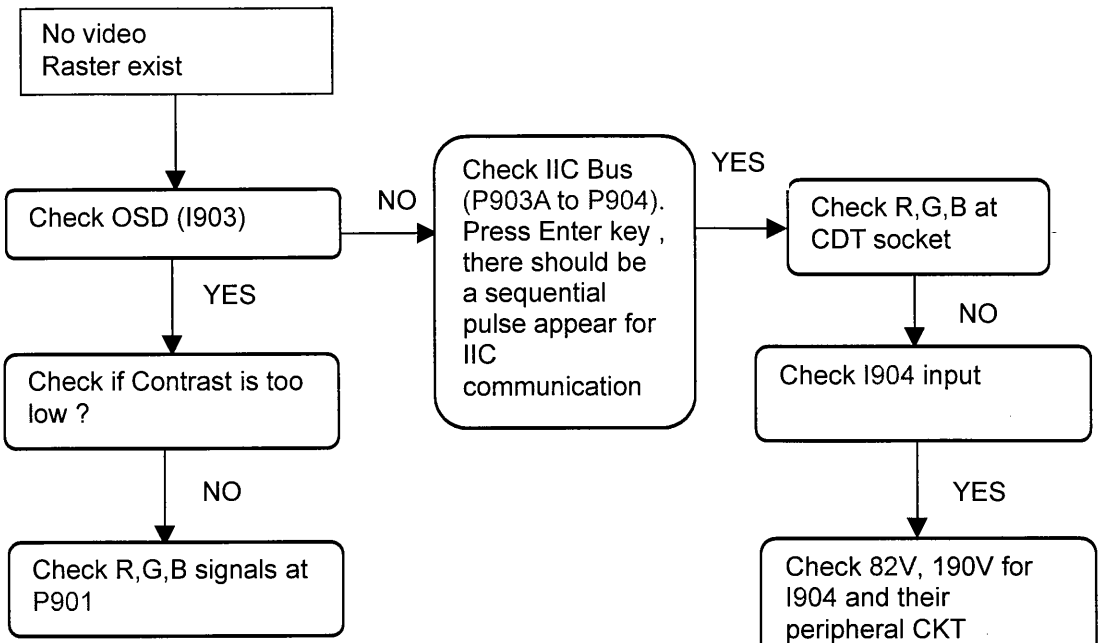

No Raster
High Voltage exist
G2 = 400 to 650 V
(Do not clockwise turn the
Screen VR to extreme)
NO
Replace
T101(FBT)
YES
I301 Pin3
HUNLOCK HIGH ?
YES
Check IIC bus
from Pin27,28
of IA01 to
IA02,I301,I901
No
NO
P410 CONNECTION
proper ?
Check IA01 and
its peripheral CKT
YES
NO
TO SECTION 6 : Horiz.
Line, No Vert. output
TO SECTION 5 : Vert.
line, No Horiz. output
Replace IA01

SECTION 5

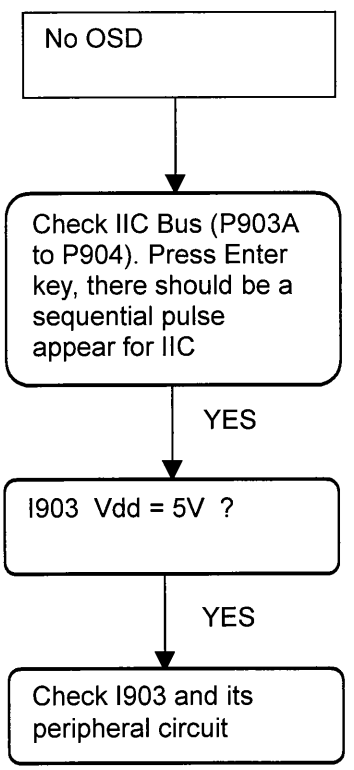

Display is Vertical. Line
(No Horizontal output)
DC at Source of
Q402 =
190Vapprox.
NO
Check SMPS DC output
(SECTION 1)
YES
Is waveform at
Drain of Q402 Proper ?
YES
Check Q433 short?,
and is Q433 output
proper ?
NO
NO
Is output of
Q400,Q421 proper ?
Is Q404 output
proper ?
NO
NO
Is output at Pin 28
of I301 proper ?
Is output at Pin
26of I301 proper ?
NO
NO
REPLACE I301


Display is Horizontal. Line,
(No Vertical. output)
Pin 2 of I310 = 15V approx.
Pin4 of I310 = -15.V approx.
NO
Check SMPS DC output
YES
I310 Pin1,Pin7
Input proper ?
NO
Are there output
at pin 3,5 of I301
?
NO
Check I301 AND
Peripheral CKT

SECTION 7



SECTION 8


No OSD
Check IIC Bus (P903A to P904). Press Enter key, there should be a sequential pulse appear for IIC
YES
I903 Vdd = 5V ?
YES
Check I903 and its peripheral circuit

11.REPLACEMENT PARTS LIST

WARNING: Replacement parts that have special characteristics important to safety should be replaced only with types identical to those in the original circuit or specified in the parts list. Before replacing any of these components, read carefully the product safety precautions. Do not degrade the safety of the display through improper servicing

ABBREVIATIONS:

RESISTOR

PART NAME & DESCRIPTION			
TYPE		ALLOWANCE	
R	Resistor	F	±1%
CF	Carbon Film	G	±2%
CC	Carbon Composition	J	±5%
MOF	Metal Oxide Film	K	±10%
FU	Fusible	M	±20%
MF	Metal Film		
VR	Variable Resistor		
CR	Cement Resistor		
SMD	Thick Film Chip 1206		

CAPACITOR

PART NAME & DESCRIPTION			
TYPE		ALLOWANCE	
C	Capacitor	F	±1%
CE	Ceramic	G	±2%
EL	Electrolytic	J	±5%
PO	Polyester	K	±10%
TA	Tantalum	M	±20%
PP	Polypropylene	P	±100%–0%
ME	Metalized	Z	±80%–20%
BL	Barrier Layer		
SMD	Monolithic SMD 0805		

ASSEMBLY PCB-MAIN (PWB-0334)

CAPACITOR

CKT NO.	ViewSonic P/N	Part no.	Description
C100	**E-C-0404-4749**	5248422091	C. CE 2KV 22PF J
C101	**E-C-0404-4750**	5234333191	C. CE 2KV 330PF K
C103	**E-C-0404-4373**	5213610091	C. EL 50V 1UF M
C104	**E-C-0404-4759**	5214701091	C. EL 450V 1UF M
C105	**E-C-0404-4132**	5275122491	C. ME 63V 0.22MF J
C106	**E-C-0404-3352**	5276110491	C. ME 100V 0.1UF J
C107	**E-C-0404-4377**	5205647991	C. EL 50V 4.7UF M
C108	**E-C-0404-4374**	5213601091	C. EL 50V 1UF M
C109	**E-C-0404-4137**	5236310491	C. BL 50V 0.1UF Z
C110	**E-C-0404-4140**	5231310291	C. CE 50V 1000PF K
C111	**E-C-0404-4020**	5275115491	C. ME 63V 0.15UF J
C112	**E-C-0404-4771**	5221122391	C. PO 50V 22000PF J
C114	**E-C-0404-4761**	5271133391	C. ME 100V 33000PF J
C115	**E-C-0404-3352**	5276110491	C. ME 100V 0.1UF J
C116	**E-C-0404-4136**	5213622091	C. EL 50V 22UF M
C117	**E-C-0404-4761**	5271133391	C. ME 100V 33000PF J
C118	**E-C-0404-4352**	5206147012	C. EL 100V 47UF M
C120	**E-C-0404-4136**	5213622091	C. EL 50V 22UF M
C121	**E-C-0404-4137**	5236310491	C. BL 50V 0.1UF Z
C122	**E-C-0404-4374**	5213601091	C. EL 50V 1UF M
C126	**E-C-0404-4346**	5232322291	C. CE 500V 2200PF K
C127	**E-C-0404-4131**	5232310291	C. CE 500V 1000LF K
C128	**E-C-0404-4770**	5223510201	C. PO 400V 1000PF K
C129	**E-C-0404-4368**	5213447091	C. EL 25V 47UF M
C130	**E-C-0404-4760**	5271110501	C. ME 100V 1UF J 35KHz
C131	**E-C-0404-4333**	5233310291	C. CE 1KV 1000PF K
C132	**E-C-0404-4774**	5223447301	C. PO250V 47000PF J5KHz
C133	**E-C-0404-4137**	5236310491	C. BL 50V 0.1UF Z
C134	**E-C-0404-4373**	5213610091	C. EL 50V 10UF M

CKT NO.	ViewSonic P/N	Part no.	Description
C135	E-C-0404-4364	5214433012	C. EL 250V 33UF M
C136	E-C-0404-4134	5213633091	C. EL 50V 33UF M
C137	E-C-0404-4760	5271110501	C. ME 100V 1UF J
C138	E-C-0404-4773	5223015200	C. PO 800V 1500PF J
C139	E-C-0404-4755	5214019612	C. EL 100V 330UF M
C301	E-C-0404-3352	5276110491	C. ME 100V 0.1UF J
C302	E-C-0404-1004	5221168291	C. PO 50V 6800PF J
C303	E-C-0404-4351	5247082191	C. CE 50V 820PF J
C304	E-C-0404-4392	5275115391	C. ME 63V 15000PF J
C305	E-C-0404-4377	5213647991	C. EL 50V 4.7UF M
C306	E-C-0404-4374	5213601091	C. EL 50V 1UF M
C307	E-C-0404-4351	5247082191	C. CE 50V 820PF J
C308	E-C-0404-4765	5227518291	C. PO 100V 1800PF G
C309	E-C-0404-1119	5247022191	C. CE 50V 220PF J
C310	E-C-0404-4391	5275147491	C. ME 63V 0.47MF J
C311	E-C-0404-1397	5247039091	C. CE 50V 39PF J
C312	E-C-0404-4132	5275122491	C. ME 63V 0.22MF J
C313	E-C-0404-4368	5213447091	C. EL 25V 47UF M
C313A	E-C-0404-4343	5242210091	C. CE 50V 10PF J
C314	E-C-0404-4343	5242210091	C. CE 50V 10PF J
C315	E-C-0404-1118	5247010191	C. CE 50V 100PF J
C316	E-C-0404-1118	5247010191	C. CE 50V 100PF J
C317	E-C-0404-4368	5213447091	C. EL 25V 47UF M
C318	E-C-0404-4358	5213322191	C. EL 16V 220UF M
C319	E-C-0404-4131	5232310291	C. CE 500V 1000PF K
C320	E-C-0404-4389	5275110491	C. ME 63V 0.1MF J
C321	E-C-0404-4389	5275110491	C. ME 63V 0.1MF J
C322	E-C-0404-1408	5247068191	C. CE 50V 680PF J
C382	E-C-0404-2896	5213310191	C. EL 16V 100UF M
C383	E-C-0404-4031	5222433291	C. PO 100V 3300PF J
C384	E-C-0404-4137	5236310491	C. BL 50V 0.1UF Z
C385	E-C-0404-4357	5213310212	C. EL 16V 1000UF M
C386	E-C-0404-4357	5213310212	C. EL 16V 1000UF M
C387	E-C-0404-4379	5277127401	C. ME 100V 0.27MF J
C388	E-C-0404-3451	5213610191	C. EL 50V 100UF M
C390	E-C-0404-1287	5233315191	C. CE 1KV 150PF K
C400	E-C-0404-4768	5223433301	C. PO 250V 33000PF J
C401	E-C-0404-4368	5213447091	C. EL 25V 47UF M
C401A	E-C-0404-4137	5236310491	C. BL 50V 0.1UF Z
C402	E-C-0404-4757	5214410112	C. EL 250V 100UF M
C402A	E-C-0404-4337	5232310301	C. CE 500V 10000PF K
C403	E-C-0404-4767	5223422301	C. PO 250V 22000PF J
C403A	E-C-0404-3909	5233318191	C. CE 1KV 180PF K
C404	E-C-0404-4772	5223622201	C. PO 630V 2200PF J
C405	E-C-0404-4752	5248468091	C. CE 2KV 68PF J
C406	E-C-0404-4766	5223751200	C. PO 1600V 5100PF J
C406A	E-L-0407-1389	5061105400	C. BE BRH5X4X1.5
C406E	M-MS-0808-7918	5056208100	C. EYELET 1.6
C407	E-C-0404-4391	5275147491	C. ME 63V 0.47UF J
C409	E-C-0404-4769	5223468201	C. PO 250V 6800PF J
C410	E-C-0404-4373	5213610091	C. EL 50V 10UF M
C411	E-C-0404-4751	5234547201	C. CE 2KV 4700PF M
C411A	E-C-0404-4131	5232310291	C. CE 500V 1000PF K
C412	E-C-0404-4750	5234333191	C. CE 2KV 330PF K
C413	E-C-0404-4756	5214222991	C. EL 160V 2.2UF M
C414	E-C-0404-4363	5206422991	C. EL 250V 2.2UF M
C415	E-C-0404-2270	5213422191	C. EL 16V 470UF M
C416	E-C-0404-4388	5270208001	C. ME 400V 0.27UF J
C419	E-C-0404-4387	5270207401	C. ME 400V 0.22UF J
C420	E-C-0404-4762	5270356402	C. ME 250V 0.56UF J
C421	E-C-0404-4763	5270312502	C. ME 250V 1.2UF J
C422	E-C-0404-4330	5213410191	C. EL 25V 100UF M

CKT NO.	ViewSonic P/N	Part no.	Description
C423	E-C-0404-4235	5270207701	C. ME 400V 0.1UF J
C454	E-C-0404-4363	5214422991	C. EL 250V 2.2UF M
C455	E-C-0404-4363	5214422991	C. EL 250V 2.2UF M
C801	E-C-0404-4754	5214110091	C. EL 100V 10UF M
C802	E-C-0404-4336	5230105501	C. CE 400V 4700UF M
C803	E-C-0404-4336	5230105501	C. CE 400V 4700UF M
C804A	E-C-0404-4764	5270110901	C. ME 275V 0.1UF K
C804B	E-C-0404-4764	5270110901	C. ME 275V 0.1UF K
C809	E-C-0404-4372	5210313400	C. EL 400V 220UF M
C809E	M-MS-0808-7919	5056208101	C. EYELET 2.4X3
C811	E-C-0404-4136	5213622091	C. EL 50V 22UF M
C812	E-C-0404-4136	5213622091	C. EL 50V 22UF M
C813	E-C-0404-4772	5223622201	C. PO 630V 2200UF J
C814	E-C-0404-4136	5213622091	C. EL 50V 22UF M
C815	E-C-0404-4330	5213410191	C. EL 25V 100UF M
C816	E-C-0404-4373	5213610091	C. EL 50V 10UF M
C817	E-C-0404-4328	5214122091	C. EL 100V 22UF M
C818	E-C-0404-4346	5231322291	C. CE 50V 2200UF K
C819	E-C-0404-1030	5221122291	C. PO 50V 2200PFJ
C820	E-C-0404-4392	5275115391	C. ME 63V 15000PF J
C821	E-C-0404-4330	5213410191	C. EL 25V 100UF M
C822	E-C-0404-4136	5213622091	C. EL 50V 22UF M
C823	E-C-0404-4137	5236310491	C. BL 50V 0.1UF Z
C824	E-C-0404-1871	5233310191	C. CE 1KV 100PF K
C825	E-C-0404-4757	5214410112	C. EL 250V 100UF M
C826	E-C-0404-3909	5233318191	C. CE 1KV 180PF K
C827	E-C-0404-4355	5214019812	C. EL 100V 220UF M
C828	E-C-0404-4137	5236310491	C. BL 50V 0.1UF Z
C829	E-C-0404-4365	5213410212	C. EL 25V 1000UF M
C830	E-C-0404-3909	5233318191	C. CE 1KV 180PF K
C831	E-C-0404-2270	5205347112	C. EL 16V 470UF M
C832	E-C-0404-3603	5234310101	C. CE 2KV 100PF K
C833	E-C-0404-4758	5214019791	C. EL 25V 330UF M
C834	E-C-0404-4761	5271133391	C. ME 100V 33000PF J
C835	E-C-0404-3909	5233318191	C. CE 1KV 180PF K
C836	E-C-0404-4357	5213310212	C. EL 16V 1000UF M
C837	E-C-0404-4358	5213322191	C. EL 16V 220UF M
C838	E-C-0404-4368	5213447091	C. EL 25V 47UF M
C840	E-C-0404-4355	5213222191	C. EL 10V 220UF M
C841	E-C-0404-4357	5213310212	C. EL 16V 1000UF M
C842	E-C-0404-4137	5236310491	C. BL 50V 0.1UF Z
C842	E-C-0404-4137	5236310491	C. BL 50V 0.1UF Z
C844	E-C-0404-4746	5205622091	C. EL 50V 22UF M
C845	E-C-0404-4368	5213447091	C. EL 25V 47UF M
C846	E-C-0404-4137	5236310491	C. BL 50V 0.1UF Z
C847	E-C-0404-2139	5232310191	C. CE 500V 100PF K
C848	E-C-0404-3909	5233318191	C. CE 1KV 180PF K
C849	E-C-0404-4136	5213622091	C. EL 50V 22UF M
C850	E-C-0404-4336	5230105501	C. CE AC400V 4700PF M
C851	E-C-0404-4336	5230105501	C. CE AC400V 4700PF M
C853	E-C-0404-1287	5233315191	C. CE 1KV 150PF K
C870	E-C-0404-4361	5216410001	C. EL 250V 10UF M
C870A	E-C-0404-4333	5233310291	C. CE 1KV 10000PF M
C872	E-C-0404-4367	5214005001	C. EL 25V 470UF M
C875	E-C-0404-2896	5213310191	C. EL 16V 100UF M
C875A	E-C-0404-4140	5231310291	C. CE 50V 1000PF K
C876	E-C-0404-4357	5213310212	C. EL 16V 1000UF M
C881A	E-C-0404-4748	5234318191	C. CE 2KV 180PF K
C882A	E-C-0404-1171	5234327191	C. CE 2KV 270PF K
C883	E-C-0404-4750	5234333101	C. CE 2KV 330PF K
C886	E-C-0404-3352	5276110491	C. ME 100V 0.1UF J
C886A	E-C-0404-4337	5232310301	C. CE 500V 10000PF K

CKT NO.	ViewSonic P/N	Part no.	Description
C877	E-C-0404-4328	5214122091	C. EL 100V 22UF M
CA01	E-C-0404-4360	5213347091	C. EL 16V 47UF M
CA02	E-C-0404-4343	5242210091	C. CE 50V 10PF J
CA03	E-C-0404-4343	5242210091	C. CE 50V 10PF J
CA04	E-C-0404-4344	5242212191	C. CE 50V 120PF J
CA05	E-C-0404-4344	5242212191	C. CE 50V 120PF J
CA06	E-C-0404-4344	5242212191	C. CE 50V 120PF J
CA07	E-C-0404-4375	5213622991	C. EL 50V 2.2UF M
CA08	E-C-0404-4377	5213647991	C. EL 50V 4.7UF M
CA09	E-C-0404-4377	5213647991	C. EL 50V 4.7UF M
CA10	E-C-0404-4747	5213222212	C. EL 10V 2200UF M
CA11	E-C-0404-4344	5242212191	C. CE 50V 120PF J
CA12	E-C-0404-4140	5231310291	C. CE 50V 1000PF K
CA13	E-C-0404-4347	5231333191	C. CE 50V 330PF K
CA14	E-C-0404-4375	5213622991	C. EL 50V 2.2UF M
CA15	E-C-0404-4377	5213647991	C. EL 50V 4.7UF M
CA16	E-C-0404-4373	5213610091	C. EL 50V 10UF M
CA17	E-C-0404-1118	5242210191	C. CE 50V 100PF J
CA18	E-C-0404-1118	5242210191	C. CE 50V 100PF J
CA19	E-C-0404-1118	5242210191	C. CE 50V 100PF J
CA20	E-C-0404-4131	5232310291	C. CE 500V 1000PF K
CA22	E-C-0404-1118	5242210191	C. CE 50V 100PF J
CA25	E-C-0404-1118	5242210191	C. CE 50V 100PF J
CA26	E-C-0404-1118	5242210191	C. CE 50V 100PF J
C805	E-C-0404-4337	5232310301	C CC 500V 0.01U
C806	E-C-0404-4337	5232310301	C CC 500V 0.01U
C881	E-SP-0417-0088	5202200591	SPARK GAP 1.2KV
SEMICONDUTOR			
DIODE			
D101	E-D-0403-1853	6611032640	DIODE DIODE RECTIFIER BYV26DGP 800V 1A
D104*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA,RB,RC)
D105*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA,RB,RC)
D108*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA,RB,RC)
D109*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA,RB,RC)
D110 (RA)	E-D-0403-1987	6615021430	DIODE ZENER BZX79C51
D110 (RB)	E-D-0403-1943	6615015640	DIODE ZENER IN5262B
D110 (RC)	E-D-0403-2008	6615021441	DIODE ZENER IN5262B-RL
D110A (RA)	E-D-0403-1869	6615013831	DIODE ZENER HZ33-2-TD 32.2-33.6V
D111	E-D-0403-2005	6615012530	DIODE ZENER HZ4A2-TD 3.5-3.7V 5mA 0.5w
D112*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA,RB,RC)
D113*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA,RB,RC)
D114 (RA)	E-D-0403-1856	6613002244	DIODE SWITCHING RGP10D-G23
D114 (RB)	E-D-0403-1854	6611035644	DIODE SWITCHING RGP10D
D115 (RA)	E-D-0403-1856	6613002244	DIODE SWITCHING RGP10D-G23
D115 (RB)	E-D-0403-1854	6611035644	DIODE SWITCHING RGP10D
D116*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA,RB,RC)
D118 (RA)	E-D-0403-2001	6615009752	DIODE ZENER RD6.8B2-T7
D118 (RB)	E-D-0403-1998	6615007234	DIODE ZENER HZ7B1-TD 6.7-7V
D119*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA,RB,RC)
D120*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA,RB,RC)
D121*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA,RB,RC)
D125*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA,RB,RC)
D126 (RA)	E-D-0403-1866	6611018200	DIODE RECTIFIER 30DF2
D126 (RB)	E-D-0403-1990	6611015245	DIODE RECTIFIER GUF30D
D127	E-D-0403-1995	6611035643	DIODE SWITCHING RGP10G
D128	E-D-0403-1991	6611019241	DIODE RECTIFIER BYD73G
D301	E-D-0403-1868	6615007834	DIODE ZENER HZ5C1-TD 4.9-5.1V
D310#	E-D-0403-1750	6611007240	DIODE RECTIFIER 1N4002RL(RA,RB,RC,RD)
D401*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA,RB,RC)
D402 (RA)	E-D-0403-1999	6615009336	DIODE ZENER BZX79C10
D402 (RB)	E-D-0403-2000	6615009337	DIODE ZENER HZ11A3-TD
D403 (RA)	E-D-0403-1988	6611010941	DIODE RECTIFIER BYV99

CKT NO.	ViewSonic P/N	Part no.	Description
D403 (RC)	E-D-0403-1989	6611012141	DIODE RECTIFIER UGP15J 600V 1.5A
D404	E-D-0403-0813	6611018703	DIODE RECTIFIER BY329X-1500S 1500V 8A
D407*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA,RB,RC)
D410	E-D-0403-1752	6611070347	DIODE RECTIFIER SR204
D477	E-D-0403-1992	6611025643	DIODE SWITCHING RDP10G
D478	E-D-0403-1992	6611025643	DIODE SWITCHING RDP10G
D800 (RA)	E-D-0403-1852	6611029554	DIODE RECTIFIER 1N5406-M FORMED
D800 (RB)	E-D-0403-1852	6611029555	DIODE RECTIFIER 1N5406-M PREFORMED
D801 (RA)	E-D-0403-1852	6611029554	DIODE RECTIFIER 1N5406-M FORMED
D801 (RB)	E-D-0403-1852	6611029555	DIODE RECTIFIER 1N5406-M PREFORMED
D802 (RA)	E-D-0403-1852	6611029554	DIODE RECTIFIER 1N5406-M FORMED
D802 (RB)	E-D-0403-1852	6611029555	DIODE RECTIFIER 1N5406-M PREFORMED
D803 (RA)	E-D-0403-1852	6611029554	DIODE RECTIFIER 1N5406-M FORMED
D803 (RB)	E-D-0403-1852	6611029555	DIODE RECTIFIER 1N5406-M PREFORMED
D804 (RA)	E-D-0403-1853	6611032640	DIODE RECTIFIER FRRD BYV26DGP 800V 1A 75nS
D804 (RB)	E-D-0403-1839	6611012835	DIODE RECTIFIER UFRRD 1NU41-TP3
D804 (RC)	E-D-0403-1839	6611032644	DIODE RECTIFIER GUF10K
D805*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC)
D806 (RA)	E-D-0403-1853	6611032640	DIODE RECTIFIER FRRD BYV26DGP 800V 1A 75nS
D806 (RB)	E-D-0403-1839	6611012835	DIODE RECTIFIER UFRRD 1NU41-TP3
D806 (RC)	E-D-0403-1839	6611032644	DIODE RECTIFIER GUF10K
D807 (RA)	E-D-0403-2003	6615011831	DIODE ZENER RD20EB2-T1
D807 (RB)	E-D-0403-2004	6615011833	DIODE ZENER HZ20-1-TD
D808*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC)
D809 (RA)	E-D-0403-1856	6613002244	DIODE SWITCHING RGP10D-G23
D809 (RB)	E-D-0403-1854	6611035644	DIODE SWITCHING RGP10D
D810*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC)
D811 (RA)	E-D-0403-1844	6611070541	DIODE RECTIFIER SBD 1N5817 20V 1A
D811 (RB)	E-D-0403-1843	6611015831	DIODE RECTIFIER SBD SB020-G3
D812 (RA)	E-D-0403-1853	6611032640	DIODE RECTIFIER FRRD BYV26DGP 800V 1A 75nS
D812 (RB)	E-D-0403-1839	6611032644	DIODE RECTIFIER GUF10K
D812 (RC)	E-D-0403-1839	6611032644	DIODE RECTIFIER UFRRD 1NU41-TP3
D815	E-D-0403-1839	6611012835	DIODE RECTIFIER 1NU41-TP3
D816 (RA)	E-D-0403-0612	6611032341	DIODE RECTIFIER 2NU41-TPA1
D816 (RB)	E-D-0403-1993	6611032244	DIODE RECTIFIER HER308G 1000V/3A
D817 (RA)	E-D-0403-1842	6611015244	DIODE RECTIFIER UF5402G
D817 (RB)	E-D-0403-1866	6611018200	DIODE RECTIFIER 30DF2
D817 (RC)	E-D-0403-1990	6611015245	DIODE RECTIFIER GUF30D
D818 (RA)	E-D-0403-1842	6611015244	DIODE RECTIFIER UF5402G
D818 (RB)	E-D-0403-1866	6611018200	DIODE RECTIFIER 30DF2
D818 (RC)	E-D-0403-1990	6611015245	DIODE RECTIFIER GUF30D
D819 (RA)	E-D-0403-1994	6611032641	DIODE RECTIFIER UFRRD 2NU41-TPA1
D819 (RB)	E-D-0403-1866	6611018200	DIODE RECTIFIER 30DF2
D820 (RA)	E-D-0403-1856	6613002244	DIODE SWITCHING RGP10D
D820 (RB)	E-D-0403-1996	6613002248	DIODE SWITCHING 1N4935
D820 (RC)	E-D-0403-1854	6611035644	DIODE RECTIFIER RGP10D
D821	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC)
D822	E-D-0403-1750	6611007240	DIODE RECTIFIER 1N4002RL(RA.B.RC.RD)
D823 (RA)	E-D-0403-1040	6615006443	DIODE ZENER RD6.2EB2-T1 5.99-6.24V
D823 (RB)	E-D-0403-1878	6615009756	DIODE ZENER HZ6C2-TD 6-6.3V
D825 (RA)	E-D-0403-1856	6613002244	DIODE SWITCHING RGP10D
D825 (RB)	E-D-0403-1996	6613002248	DIODE SWITCHING 1N4935
D825 (RC)	E-D-0403-1854	6611035644	DIODE RECTIFIER RGP10D
D826 (RA)	E-D-0403-2002	6615011333	DIODE ZENER 1N5252B-RL
D826 (RB)	E-D-0403-0649	6615023331	DIODE ZENER HZ24-2-TD 23.6~24.7V
D827	E-D-0403-1997	6615005245	DIODE ZENER HZ-16-2-TA
D828 (RA)	E-D-0403-1984	6611007242	DIODE RECTIFIER 1N4002 G23
D828 (RB)	E-D-0403-1750	6611007240	DIODE RECTIFIER 1N4002RL
D828 (RC)	E-D-0403-0022	6611007244	DIODE RECTIFIER 1N4002
D829 (RA)	E-D-0403-2006	6615018830	DIODE ZENER RD18EB2-T1
D829 (RB)	E-D-0403-2007	6615018834	DIODE ZENER HZ18-1-TD
D830*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC)

CKT NO.	ViewSonic P/N	Part no.	Description
D831 (RA)	E-D-0403-1844	6611070541	DIODE RECTIFIER 1N5817 SBD 20V 1A
D831 (RB)	E-D-0403-1843	6611015831	DIODE RECTIFIER SB020-G3
D840*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC)
D850	E-D-0403-1839	6611012835	DIODE RECTIFIER 1NU41-TP3
DA01*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC)
DA01A*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC)
DA02	E-D-0403-1868	6615007834	DIODE ZENER HZ5C1-TD 4.9-5.1
DA03	M-MS-0808-7922	6618020800	LED HOLDER LAMP CSL-H5061YG2M
DA04*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC)
DA05*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC)
DA06*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC)
DA07*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC)
DA08*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC)
DA09*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC)
DA10*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC)
DA11*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC)
PS: * 1N4148 : RA 6613003032 RB 6613003037 RC 6613003048			
#1N4002 : RA 6611007240 RB 6611007244 RC 6611007243 RD 6611007245			
IC			
I101 (RA)	E-IC-0401-0277	6644063111	IC LINER UC3842BN
I101 (RB)	E-IC-0401-2503	6644063112	IC LINER DBL3842
I301	E-IC-0401-2275	6644076305	IC LINER DEFLECTION TDA9113 SDIP32
I310	E-IC-0401-0005	6644076000	IC LINER V-O/P TDA8172 7P
I802 (RA)	E-IC-0401-2500	6640000410	IC VOLTAGE REGULATOR HA17805P
I802 (RB)	E-IC-0401-0434	6640001900	IC VOLTAGE REGULATOR AN7805
I802 (RC)	E-IC-0401-2501	6640001905	IC VOLTAGE REGULATOR MA7805
I803 (RA)	E-IC-0401-0277	6644063111	IC LINER UC3842BN
I803 (RB)	E-IC-0401-2503	6644063112	IC LINER DBL3842
I804 (RA)	E-IC-0401-2449	6642002904	IC PHOTO COUPLER TLP721F
I804 (RB)	E-IC-0401-2449	6642002906	IC PHOTO COUPLER LTV817M
I804 (RC)	E-PC-0411-0081	6642002909	IC PHOTO COUPLER KP1010H-B
I805 (RA)	E-IC-0401-2449	6642002904	IC PHOTO COUPLER TLP721F
I805 (RB)	E-IC-0401-2449	6642002906	IC PHOTO COUPLER LTV817M
I805 (RC)	E-PC-0411-0081	6642002909	IC PHOTO COUPLER KP1010H-B
I807 (RA)	E-IC-0401-2449	6642002904	IC PHOTO COUPLER TLP721F
I807 (RB)	E-IC-0401-2449	6642002906	IC PHOTO COUPLER LTV817M
I807 (RC)	E-PC-0411-0081	6642002909	IC PHOTO COUPLER KP1010H-B
I808 (RA)	E-IC-0401-2448	6640007705	IC VOLTAGE REGULATOR ADJ A431LP (1%) TC-92 (LP)
I808 (RB)	E-IC-0401-2448	6640007706	IC VOLTAGE REGULATOR TL431ACLP (1%)TO-92
I808 (RC)	E-IC-0401-2502	6640007712	IC VOLTAGE REGULATOR TL431LN 1% TO-92
I871 (RA)	E-IC-0401-2306	6640002705	IC VOLTAGE REGULATOR L8712CV 12V 1.5A
I871 (RB)	E-IC-0401-0188	6640002000	IC VOLTAGE REGULATOR L8712 12V 1.5A
I871 (RC)	E-IC-0401-2321	6640002006	IC VOLTAGE REGULATOR L8712BE12V 1.5A
I871 (RD)	E-IC-0401-2320	6640002003	IC VOLTAGE REGULATOR L8712API 12V 1.5A
IA01 (RA)	E-IC-0401-2416	6647008204	IC LSI MCU FLASH MTP NT68F62U SDIP-42 8BIT 32K
IA01 (RB)	E-IC-0401-2451	6647008206	IC LSI MCU OTP NT68F62U SDIP-42 8BIT 32K
IA02 (RA)	E-IC-0401-1888	6647051822	IC MEMORY EEPROM 8K 24LC08B/P DIP-8
IA02 (RB)	E-IC-0401-1888	6647051823	IC MEMORY CMOS EEPROM AT24C08-10PC DIP-8
IA02 (RC)	E-IC-0401-2417	6647051824	IC MEMORY CMOS EEPROM 24WC08P DIP-8
IA02 (RD)	E-IC-0401-2504	6647051825	IC MEMORY CMOS EEPROM S524C80D81-DCB0
			(KS24C081C) DIP-8
TRANSISTOR			
Q104	E-Q-0402-1360	6621015332	TRANSISTOR NPN HF 2SC1815Y
Q104A (RA)	E-Q-0402-1360	6621015332	TRANSISTOR NPN HF 2SC1815Y
Q104A (RB)	E-Q-0402-1420	6621015335	TRANSISTOR NPN HF H945P
Q105	E-Q-0402-1084	6621040730	TRANSISTOR NPN HF MPSA44 500V 0.6A TO-92
Q108	E-Q-0402-1519	6624009232	TRANSISTOR PNP MPSA92
Q111	E-Q-0402-1517	6621006530	TRANSISTOR NPN BC548C
Q114	E-Q-0402-1360	6621015332	TRANSISTOR NPN 2SC1815Y
Q115	E-Q-0402-1424	6623002050	TRANSISTOR PNP 2SA1015Y
Q116	E-Q-0402-1360	6621015332	TRANSISTOR NPN 2SC1815Y
Q117	E-Q-0402-1424	6623002050	TRANSISTOR PNP 2SA1015Y

CKT NO.	ViewSonic P/N	Part no.	Description
Q118	E-Q-0402-1424	6623002050	TRANSISTOR PNP 2SA1015Y
Q121	E-Q-0402-1359	6626005102	TRANSISTOR FET MOS 2SK2628 600V 6A TO-220FI
Q122	E-Q-0402-1485	6621040830	TRANSISTOR NPN BC639
Q123	E-Q-0402-1517	6621006530	TRANSISTOR NPN BC548C
Q124	E-Q-0402-1415	6626004000	TRANSISTOR FET MOS N-CH 2SK2161
Q125	E-Q-0402-1489	6626006130	TRANSISTOR FET MOSFET BSN254A
Q126	E-Q-0402-1517	6621006530	TRANSISTOR NPN BC548C
Q301	E-Q-0402-1360	6621015332	TRANSISTOR NPN 2SC1815Y
Q302	E-Q-0402-1360	6621015332	TRANSISTOR PNP 2SC1815Y
Q303	E-Q-0402-1360	6621015332	TRANSISTOR NPN 2SC1815Y
Q400 (RA)	E-Q-0402-1360	6621015332	TRANSISTOR NPN 2SC1815Y
Q400 (RB)	E-Q-0402-1516	6621003230	TRANSISTOR NPN 2SC458C
Q401	E-Q-0402-1424	6623002050	TRANSISTOR PNP 2SA1015Y
Q402 RA)	E-Q-0402-1447	6626005700	TRANSISTOR FET MOSFET 2SJ449
Q402 (RB)	E-Q-0402-1512	6626005702	TRANSISTOR FET MOSFET 2SJ512
Q404	E-Q-0402-1486	6622018000	TRANSISTOR NPN LF 2SD882Q
Q405	E-Q-0402-1486	6622018000	TRANSISTOR NPN LF 2SD882Q
Q410 (RA)	E-Q-0402-1429	6626000605	TRANSISTOR FET MOS IRFS630A
Q410 (RB)	E-Q-0402-1520	6626000604	TRANSISTOR FET MOS IRFS630MFP
Q410 (RC)	E-Q-0402-1415	6626004000	TRANSISTOR FET MOSFET N-CH 2SK2161
Q411 (RA)	E-Q-0402-1419	6621026430	TRANSISTOR NPN BF422
Q411 (RB)	E-Q-0402-1518	6621026401	TRANSISTOR NPN BF422
Q412 (RA)	E-Q-0402-1429	6626000605	TRANSISTOR FET MOS IRFS630A
Q412 (RB)	E-Q-0402-1520	6626000604	TRANSISTOR FET MOS IRFS630MFP
Q412 (RC)	E-Q-0402-1415	6626004000	TRANSISTOR FET MOSFET N-CH 2SK2161
Q413 (RA)	E-Q-0402-1419	6621026430	TRANSISTOR NPN BF422
Q413 (RB)	E-Q-0402-1518	6621026401	TRANSISTOR NPN BF422
Q414 (RA)	E-Q-0402-1429	6626000605	TRANSISTOR FET MOS IRFS630A
Q414 (RB)	E-Q-0402-1520	6626000604	TRANSISTOR FET MOS IRFS630MFP
Q414 (RC)	E-Q-0402-1415	6626004000	TRANSISTOR FET MOSFET N-CH 2SK2161
Q415 (RA)	E-Q-0402-1419	6621026430	TRANSISTOR NPN BF422
Q415 (RB)	E-Q-0402-1518	6621026401	TRANSISTOR NPN BF422
Q416 (RA)	E-Q-0402-1429	6626000605	TRANSISTOR FET MOS IRFS630A
Q416 (RB)	E-Q-0402-1520	6626000604	TRANSISTOR FET MOS IRFS630MFP
Q416 (RC)	E-Q-0402-1415	6626004000	TRANSISTOR FET MOSFET N-CH 2SK2161
Q417 (RA)	E-Q-0402-1419	6621026430	TRANSISTOR NPN BF422
Q417 (RB)	E-Q-0402-1518	6621026401	TRANSISTOR NPN BF422
Q423	E-Q-0402-1486	6622018000	TRANSISTOR NPN LF 2SD882Q
Q424	E-Q-0402-1487	6624001300	TRANSISTOR NPN LF 2SB772
Q433	E-Q-0402-1463	6621002801	TRANSISTOR NPN HF BU4525AX
Q471	E-Q-0402-1461	6623006332	TRANSISTOR PNP HF KTA1273
Q472	E-Q-0402-1462	6621018032	TRANSISTOR NPN HF KTC3205Y
Q473	E-Q-0402-1360	6621015332	TRANSISTOR NPN HF 2SC1815Y
Q475	E-Q-0402-1361	6623007230	TRANSISTOR PNP HF 2SA1020-Y-TPE6
Q801 (RA)	E-Q-0402-1488	6626003208	TRANSISTOR FET MOSFET N-CH FJUI 2SK2648-01
Q804	E-Q-0402-1360	6621015332	TRANSISTOR NPN 2SC1815Y
Q805	E-Q-0402-1360	6621015332	TRANSISTOR NPN 2SC1815Y
Q806	E-Q-0402-1487	6624001300	TRANSISOR PNP LF 2SB772
Q807	E-Q-0402-1424	6623002050	TRANSISTOR PNP 2SA1015Y
Q808	E-Q-0402-1360	6621015332	TRANSISTOR NPN 2SC1815Y
Q810	E-Q-0402-1084	6621040730	TRANSISTOR NPN MPSA44
Q811	E-Q-0402-1360	6621015332	TRANSISTOR NPN 2SC1815Y
Q812	E-Q-0402-1360	6621015332	TRANSISTOR NPN 2SC1815Y
Q813	E-Q-0402-1360	6621015332	TRANSISTOR NPN 2SC1815Y
Q814	E-Q-0402-1360	6621015332	TRANSISTOR NPN 2SC1815Y
Q815	E-Q-0402-1084	6621040730	TRANSISTOR NPN MPSA44
Q816	E-Q-0402-1360	6621015332	TRANSISTOR NPN 2SC1815Y
Q820	E-Q-0402-1422	6622013330	TRANSISTOR NPN 2SD667C-TZ
Q866	E-Q-0402-1487	6624001300	TRANSISTOR PNP 2SB722
Q867	E-Q-0402-1360	6621015332	TRANSISTOR NPN 2SC1815Y
QA01	E-Q-0402-1360	6621015332	TRANSISTOR NPN 2SC1815Y
QA02	E-Q-0402-1360	6621015332	TRANSISTOR NPN 2SC1815Y

CKT NO.	ViewSonic P/N	Part no.	Description
QA03	E-Q-0402-1360	6621015332	TRANSISTOR NPN 2SC1815Y
COIL			
B801	E-L-0407-1379	5062122949	CORE, BEAD RH03506ST-B
L101	E-L-0407-1511	5064433025	COIL, PEAKING TRF-8330J 33UH J
L102	E-L-0407-1511	5064433025	COIL, PEAKING TRF-8330J 33UH J
L105	E-L-0407-1507	5062124403	COIL, CHOKE B-6-22A (0), BC0610R6HB-B3
L106	E-L-0407-1393	5062122946	CORE, BEAD RH3506AT-B
L300	E-L-0407-1377	5062118309	CORE, BEAD TEM2100 3.5X4.5X0.8
L301	E-L-0407-1511	5064433025	CORE, BEAD TRF-8330J
L401	E-T-0408-0466	5062419900	TRANS, HOR. DRIVG TLN-199
L402	E-L-0407-1508	5062228304	COIL, HOR.LINEARITY TLH-283D
L403	E-T-0408-0469	5062422500	TRANS, DYAMIC FOCUS TDF-225
L404	E-L-0407-1504	5062117701	COIL, CHOKE CHK-177A
L405	E-L-0407-1509	5062229000	COIL, HOR.CHOKE TCH-290
L800	E-T-0408-0468	5062421700	TRANS, P.FC.CORRECTION TPFC-217
L801A	M-FT-0827-0090	5061111000	FILTER, EMI TRANSFORMER TYPE TLF-110
L805	E-L-0408-1514	5061101000	COIL, BEAD HC5-035, BF45HZ-3.5X11X0.8
L870	E-L-0407-1383	5062202300	COIL, HOR.CHOKE TLN-2026
L871	E-L-0407-1383	5062202300	COIL, HOR. CHOKE TLN-2026
L872	E-L-0407-1383	5062202300	COIL, HOR.CHOKE TLN-2026
L873	E-L-0407-1504	5062117701	COIL, HOR. CHOKE CHK-177A
L874	E-L-0407-1506	5062123001	COIL, HOR.CHOKE CHK-230A
L875	E-L-0407-1383	5062202300	COIL, HOR. CHOKE TLN-2026
L876	E-L-0407-1380	5062122971	CORE, BEAD RH035078ST-B
L877	E-L-0407-1506	5062123001	CORE, CHOKE CHK-230A
RESISTOR			
R100	E-R-0405-6751	5130420206	R. CF 2W 2K J
R100A	E-R-0405-6751	5130420206	R. CF 2W 2K J
R101	E-R-0405-3872	5142433490	R. CF 1/2W 330K J
R102	E-R-0405-3872	5142433490	R. CF 1/2W 330K J
R103	E-R-0405-6911	5142162195	R. CF 1/6W 620 J
R104	E-R-0405-2328	5142818395	R. CF 1/4W 18K J
R105	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
R106	E-R-0405-6670	5142891395	R. CF 1/4W 91K J
R107	E-R-0405-2338	5142836395	R. CF 1/4W 36K J
R108	E-R-0405-6554	5142151295	R. CF 1/6W 5.1K J
R111	E-R-0405-6509	5142833195	R. CF 1/4W 330 J
R112	E-R-0405-6227	5142130295	R. CF 1/6W 3K J
R118	E-R-0405-2376	5142815295	R. CF 1/4W 1.5K J
R119	E-R-0405-3090	5142810195	R. CF 1/4W 100K J
R120	E-R-0405-6922	5130451303	R. MOF 2W 51K J
R121	E-R-0405-6788	5142415590	R. CF 1/2W 1.5M J
R121A	E-R-0405-6788	5142415590	R CF 1/2W 1.5M
R124	E-R-0405-6914	5142182195	R. CF 1/6W 820 J
R126	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
R127	E-R-0405-6902	5142112195	R. CF 1/6W 120 J
R128	E-R-0405-6793	5142133395	R. CF 1/6W 33K J
R129	E-R-0405-6522	5142115495	R. CF 1/6W 150K J
R130	E-R-0405-6538	5142127295	R. CF 1/6W 2.7K J
R131	E-R-0405-2462	5142847095	R. CF 1/4W 47 J
R132	E-R-0405-3363	5142422390	R. CF 1/2W 22K J
R135	E-R-0405-2338	5142836395	R. CF 1/4W 36K J
R136	E-R-0405-6918	5134718018	R. MF 1/6W 1.8K J
R137	E-R-0405-6917	5134715018	R. MF 1/6W 1.5K J
R138	E-R-0405-6549	5142147295	R. CF 1/6W 4.7K J
R139	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
R140	E-R-0405-6914	5142182195	R. CF 1/6W 820 J
R141	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
R142	E-R-0405-3185	5142810495	R. CF 1/4W 100K J
R146	E-R-0405-6785	5130324303	R. MOF 1W 24K J
R148	E-R-0405-5902	5142882195	R. CF 1/4W 820 J
R149	E-R-0405-6913	5142168095	R. CF 1/6W 68 J

CKT NO.	ViewSonic P/N	Part no.	Description
R150	E-R-0405-6520	5142110395	R. CF 1/6W 10K J
R151	E-R-0405-6549	5142147295	R. CF 1/6W 4.7K J
R152	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
R153	E-R-0405-3090	5142810195	R. CF 1/4W 100 J
R154	E-R-0405-6517	5142110095	R. CF 1/6W 10 J
R155	E-R-0405-6520	5142110395	R. CF 1/6W 10K J
R156	E-R-0405-6546	5142147195	R. CF 1/6W 470 J
R157	E-R-0405-5906	5130439003	R. MOF 2W 39 J
R158	E-R-0405-5879	5142810095	R. CF 1/4W 10 J
R159	E-R-0405-6517	5142110095	R. CF 1/6W 10 J
R160	E-R-0405-6546	5142147195	R. CF 1/6W 470 J
R161	E-R-0405-6518	5142110195	R. CF 1/6W 100 J
R162	E-R-0405-5934	5142822995	R. CF 1/4W 2.2 J
R163	E-R-0405-6784	5130322203	R. MOF 1W 2.2K J
R164	E-R-0405-6783	5130310403	R. MOF 1W 100K J
R165	E-R-0405-6519	5142110495	R. CF 1/6W 100K J
R166	E-R-0405-6555	5142156295	R. CF 1/6W 5.6K J
R167	E-R-0405-6789	5162162220	R. VR B 22K M
R168	E-R-0405-6547	5142147395	R. CF 1/6W 47K J
R169	E-R-0405-6547	5142147395	R. CF 1/6W 47K J
R170	E-R-0405-6910	5142139395	R. CF 1/6W 39K J
R171	E-R-0405-5898	5142856295	R. CF 1/4W 5.6K J
R172	E-R-0405-6538	5142127295	R. CF 1/6W 2.7K J
R173	E-R-0405-6897	5142802095	R. CF 1/4W 2 J
R175	E-R-0405-6912	5142162395	R. CF 1/6W 62K J
R176	E-R-0405-6790	5162162820	R. VR B 100K M
R177	E-R-0405-6809	5142862395	R. CF 1/4W 62K J
R301	E-R-0405-6919	5134756018	R. MF 1/6W 5.6K F
R302	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
R303	E-R-0405-6520	5142110395	R. CF 1/6W 10K J
R304	E-R-0405-6519	5142110495	R. CF 1/6W 100K J
R306	E-R-0405-6903	5142112395	R. CF 1/6W 12K J
R307	E-R-0405-6544	5142133295	R. CF 1/6W 3.3K J
R308	E-R-0405-6901	5142116295	R. CF 1/6W 1.6K J
R309	E-R-0405-6555	5142156295	R. CF 1/6W 5.6K J
R310	E-R-0405-6907	5142122495	R. CF 1/6W 220K J
R311	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
R312	E-R-0405-6547	5142147395	R. CF 1/6W 47K J
R313	E-R-0405-6520	5142110395	R CF 1/6W 10K J
R314	E-R-0405-6536	5142120295	R. CF 1/6W 2K J
R315	E-R-0405-6518	5142110195	R. CF 1/6W 100 J
R316	E-R-0405-6518	5142110195	R. CF 1/6W 100 J
R317	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
R318	E-R-0405-6548	5142143295	R. CF 1/6W 4.3K J
R319	E-R-0405-6904	5142113495	R. CF 1/6W 130K J
R320	E-R-0405-6523	5142115395	R. CF 1/6W 15K J
R321	E-R-0405-6906	5142122095	R. CF 1/6W 22 J
R322	E-R-0405-6518	5142110195	R. CF 1/6W 100 J
R323	E-R-0405-6518	5142110195	R. CF 1/6W 100 J
R324	E-R-0405-2330	5142815395	R. CF 1/4W 15K J
R325	E-R-0405-6896	5142816395	R. CF 1/4W 16K J
R326	E-R-0405-6535	5142127395	R. CF 1/6W 27K J
R327	E-R-0405-6545	5142139295	R. CF 1/6W 3.9K J
R384	E-R-0405-5845	5130468903	R. MOF 2W 6.8 J
R385	E-R-0405-6520	5142110395	R. CF 1/6W 10K J
R386	E-R-0405-6786	5130456903	R. MOF 2W 5.6 J
R388	E-R-0405-5765	5142415990	R. CF 1/2W 1.5 J
R389	E-R-0405-6701	5130418903	R. MOF 2W 1.8 J
R390	E-R-0405-0046	5142433190	R. CF 1/2W 330 J
R400	E-R-0405-3090	5142810195	R. CF 1/4W 100 J
R401	E-R-0405-6891	5130222007	R. MOF 1/2W 22 J
R402	E-R-0405-6212	5130468003	R. MOF 2W 68 J

CKT NO.	ViewSonic P/N	Part no.	Description
R403	E-R-0405-3408	5142812195	R. CF 1/4W 120 J
R404	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
R407	E-R-0405-0933	5130582003	R. MOF 3W 82 J
R409	E-R-0405-3072	5142822295	R. CF 1/4W 2.2K J
R410	E-R-0405-3090	5142810195	R. CF 1/4W 100 J
R412	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
R414	E-R-0405-6572	5130522103	R. MOF 3W 220 J
R415	E-R-0405-6787	5130515003	R. MOF 3W 15 J
R417	E-R-0405-6705	5136005006	R. MOF 5W 1.0 K
R426	E-R-0405-5884	5142815495	R. CF 1/4W 150K J
R427	E-R-0405-3217	5142847395	R. CF 1/4W 47K J
R429	E-R-0405-5884	5142815495	R. CF 1/4W 150K J
R430	E-R-0405-3217	5142847395	R. CF 1/4W 47K J
R432	E-R-0405-5884	5142815495	R. CF 1/4W 150K J
R433	E-R-0405-3217	5142847395	R. CF 1/4W 47K J
R437	E-R-0405-3217	5142847395	R. CF 1/4W 47K J
R438	E-R-0405-5884	5142815495	R. CF 1/4W 150K J
R453	E-R-0405-6921	5130422003	R. MOF 2W 22 J
R454	E-R-0405-6791	5162561980	R. VR B 10K M
R455	E-R-0405-6762	5142868195	R. CF 1/4W 680 J
R456	E-R-0405-6762	5142868195	R. CF 1/4W 680 J
R472	E-R-0405-6548	5142143295	R. CF 1/6W 4.3K J
R473	E-R-0405-5879	5142810095	R. CF 1/4W 10 J
R474	E-R-0405-5879	5142810095	R. CF 1/4W 10 J
R475	E-R-0405-6520	5142110395	R. CF 1/6W 10K J
R476	E-R-0405-5889	5142824195	R. CF 1/4W 240 J
R477	E-R-0405-5901	5142868395	R. CF 1/4W 68K J
R478	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
R479	E-R-0405-6221	5142130395	R CF 1/6W 30K J
R480	E-R-0405-3195	5142810295	R CF 1/4W 1K J
R481	E-R-0405-6520	5142110395	R CF 1/6W 10K J
R801	E-R-0405-6893	5142482490	R. CF 1/2W 820K J
R802	E-R-0405-6509	5142833195	R. CF 1/4W 330 J
R803	E-TH-0416-0113	5101115300	R.THERMISTOR, POSITIVE DGC2R07A
R804 (RA)	E-TH-0416-0108	5101114200	R. THERMISTOR GC-P 10D 100
R804 (RB)	E-TH-0416-0114	5101118400	R. THERMISTOR PROTECTORS 10 L 3A
R806	E-R-0405-6516	5142882495	R. CF 1/4W 820K J
R807	E-R-0405-6750	5130324803	R. FU MOF 1W 0.24 J
R808	E-R-0405-2330	5142815395	R. CF 1/4W 15 K J
R809	E-R-0405-6899	5142851495	R. CF 1/4W 510K J
R810	E-R-0405-6899	5142851495	R. CF 1/4W 510K J
R811	E-R-0405-5952	5130410303	R. MOF 2W 10K J
R812	E-R-0405-5952	5130410303	R. MOF 2W 10K J
R813	E-R-0405-5961	5130510403	R. MOF3W 100K J
R814	E-R-0405-3199	5142851995	R. CF 1/4W 5.1 J
R815	E-R-0405-3090	5142810195	R. CF 1/4W 100 J
R816	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
R817	E-R-0405-6794	5142162295	R. CF 1/6W 6.2K J
R817A	E-R-0405-1965	5162161720	R. VR 5K M
R818	E-R-0405-3185	5142810495	R. CF 1/4W 100K J
R819	E-R-0405-3210	5142847295	R. CF 1/4W 4.7K J
R820	E-R-0405-6892	5130556906	R MOF 3W 5.6 UB
R821	E-R-0405-6223	5142182295	R. CF 1/6W 8.2K J
R823	E-R-0405-6547	5142147395	R. CF 1/6W 47K J
R824	E-R-0405-6536	5142120295	R. CF 1/6W 2K J
R825	E-R-0405-2379	5142827395	R. CF 1/4W 27K J
R826	E-R-0405-3195	5142810295	R. CF 1/4W 1K J
R827	E-R-0405-1938	5162161220	R. VR 2K M
R828	E-R-0405-3090	5142810195	R. CF 1/4W 100 J
R829	E-R-0405-3199	5142851295	R. CF 1/4W 5.1K J
R831	E-R-0405-6752	5130420803	R. MOF 2W 0.2 J
R832	E-R-0405-3195	5142810295	R. CF 1/4W 1K J

CKT NO.	ViewSonic P/N	Part no.	Description
R833	E-R-0405-6518	5142110195	R. CF 1/6W 1K J
R834	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
R835	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
R836	E-R-0405-0933	5130582003	R. MOF 3W 82 J
R837	E-R-0405-6299	5142818495	R. CF 1/4W 180K J
R838	E-R-0405-6299	5142818495	R. CF 1/4W 180K J
R839	E-R-0405-6299	5142818495	R. CF 1/4W 180K J
R840	E-R-0405-6299	5142818495	R. CF 1/4W 180K J
R841	E-R-0405-6520	5142110395	R. CF 1/6W 10K J
R842	E-R-0405-6895	5142813195	R. CF 1/4W 130 J
R844	E-R-0405-6894	5142812095	R. CF 1/4W 12 J
R845	E-R-0405-6551	5142151195	R. CF 1/6W 510 J
R846	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
R847	E-R-0405-3199	5142851295	R. CF 1/4W 5.1K J
R848	E-R-0405-2472	5142843395	R. CF 1/4W 43K J
R850	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
R852	E-R-0405-6520	5142110395	R. CF 1/6W 10K J
R854	E-R-0405-3195	5142810295	R. CF 1/4W 1K J
R855	E-R-0405-6916	5130410106	R. CF 2W 100 J
R856	E-R-0405-2410	5142882295	R. CF 1/4W 8.2K J
R857	E-R-0405-3892	5142812295	R. CF 1/4W 1.2K J
R859	E-R-0405-6548	5142143295	R. CF 1/6W 4.3K J
R861	E-R-0405-6782	5142122295	R. CF 1/6W 2.2K J
R862	E-R-0405-6554	5142151295	R. CF 1/6W 5.1K J
R863	E-R-0405-6554	5142151295	R. CF 1/6W 5.1K J
R866	E-R-0405-2452	5130539903	R. MOF 3W 3.9 J
R867	E-R-0405-3892	5142812295	R. CF 1/4W 1.2K J
R868	E-R-0405-3195	5142810295	R. CF 1/4W 1K J
R869	E-R-0405-6547	5142147395	R. CF 1/6W 47K J
R871	E-R-0405-6538	5142127295	R. CF 1/6W 2.7K J
R872	E-R-0405-6513	5142843295	R. CF 1/4W 4.3 K J
R873	E-R-0405-6554	5142151295	R. CF 1/6W 5.1K J
R874	E-R-0405-6536	5142120295	R. CF 1/6W 2K J
R875	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
R876	E-R-0405-6914	5142182195	R. CF 1/6W 820 J
R877	E-R-0405-5898	5142856295	R.CF 1/4W 5.6K J
R882	E-R-0405-6817	5130315003	R. MOF 1W 15 KJ
RA01	E-R-0405-6903	5142112395	R. CF 1/6W 12KJ
RA01A	E-R-0405-6555	5142156295	R. CF 1/6W 5.6KJ
RA02	E-R-0405-6518	5142110195	R. CF 1/6W 100 J
RA03	E-R-0405-6518	5142110195	R. CF 1/6W 100 J
RA05	E-R-0405-6520	5142110395	R. CF 1/6W 10K J
RA06	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
RA07	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
RA08	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
RA09	E-R-0405-6518	5142110195	R. CF 1/6W 100 J
RA10	E-R-0405-6518	5142110195	R. CF 1/6W 100 J
RA11	E-R-0405-6518	5142110195	R. CF 1/6W 100 J
RA12	E-R-0405-6518	5142110195	R. CF 1/6W 100 J
RA13	E-R-0405-6518	5142110195	R. CF 1/6W 100 J
RA14	E-R-0405-6540	5142133195	R. CF 1/6W 330 J
RA15	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
RA16	E-R-0405-6908	5142127095	R. CF 1/6W 27 J
RA18	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
RA19	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
RA20	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
RA21	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
RA22	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
RA23	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
RA24	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
RA24A	E-R-0405-6555	5142156295	R. CF 1/6W 5.6K J
RA25	E-R-0405-6549	5142147295	R. CF 1/6W 4.7K J

CKT NO.	ViewSonic P/N	Part no.	Description
RA26	E-R-0405-6554	5142151295	R. CF 1/6W 5.1K J
RA27	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
RA28	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
RA29	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
RA30	E-R-0405-6549	5142147295	R. CF 1/6W 4.7K J
RA31	E-R-0405-6549	5142147295	R. CF 1/6W 4.7K J
RA32	E-R-0405-6518	5142110195	R. CF 1/6W 100 J
RA33	E-R-0405-6518	5142110195	R. CF 1/6W 100 J
RA34	E-R-0405-6556	5142168195	R. CF 1/6W 680 J
RA35	E-R-0405-6782	5142122295	R. CF 1/6W 2.2K J
RA36	E-R-0405-6782	5142122295	R. CF 1/6W 2.2K J
RA37	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
RA38	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
RA38A	E-R-0405-3175	5142810395	R. CF 1/4W 10K J
RA39	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
RA40	E-R-0405-3090	5142810195	R. CF 1/4W 100 J
RA41	E-R-0405-6520	5142110395	R. CF 1/6W 10K J
RA42	E-R-0405-6558	5142168395	R. CF 1/6W 68K J
RA42A	E-R-0405-3072	5142822295	R. CF 1/4W 2.2 J
RA43	E-R-0405-6545	5142139295	R. CF 1/6W 3.9K J
RA44	E-R-0405-6520	5142110395	R. CF 1/6W 10K J
RA45	E-R-0405-6520	5142110395	R. CF 1/6W 10K J
RA46	E-R-0405-6520	5142110395	R. CF 1/6W 10K J
RA47	E-R-0405-6520	5142110395	R. CF 1/6W 10K J
RA48	E-R-0405-6540	5142133195	R. CF 1/6W 330 J
RA49	E-R-0405-6782	5142122295	R. CF 1/6W 2.2K J
RA50	E-R-0405-6525	5142110295	R. CF 1/6W 1K J
RA51	E-R-0405-6518	5142110195	R. CF 1/6W 100 J
RA52	E-R-0405-6518	5142110195	R. CF 1/6W 100 J
RA53	E-R-0405-6549	5142147295	R. CF 1/6W 4.7K J
RA54	E-R-0405-6549	5142147295	R. CF 1/6W 4.7K J
RA55	E-R-0405-3892	5142812295	R CF 1/4W 1.2K J
RELAY			
SR801	E-RL-0414-0105	5054613402	RELAY OSA-SS-212DM5
SWITCH			
SA01	M-SW-0815-0203	5054512980	TACT SWITCH SKHHPM2520-PL
SA02	M-SW-0815-0203	5054512980	TACT SWITCH SKHHPM2520-PL
SA03	M-SW-0815-0203	5054512980	TACT SWITCH SKHHPM2520-PL
SA04	M-SW-0815-0203	5054512980	TACT SWITCH SKHHPM2520-PL
SA05	M-SW-0815-0203	5054512980	TACT SWITCH SKHHPM2520-PL
TRANSFORMER			
T101 (RA)	E-FBT-0406-0242	5062628031	TRANSFORMER, FLYBACK COLOR TFB-280T-31
T101 (RB)	E-FBT-0406-0243	5062628032	TRANSFORMER, FLYBACK COLOR TFB-280L-31
T401	E-T-0408-0467	5062420400	TRANSFORMER, HOR. DRIVE TLN-204
T801	E-T-0408-0451	5061369700	POWER TRANSFORMER, SWITCHING TPW-697
CRYSTAL			
XA01 (RA)	E-X-0415-0115	6699003504	CERAMIC RESONATOR CST8.00MTW (TCR-1056)
XA01 (RB)	E-X-0415-0116	6699643001	CERAMIC RESONATOR CST800MG03 0.5% 3PIN

CKT NO.	ViewSonic P/N	Part no.	Description
FUSE			
F801	**E-FS-0410-0059**	5054431539	FUSE 250V/3.15A
F801A	**M-MS-0808-7920**	5056506400	FUSE HOLDER
SPARK GAP			
Z101 (RA)	**E-SP-0417-0088**	5202200591	SPARK GAP 1.2KV 1PF(MAX)
Z101 (RB)	**E-SP-0417-0087**	5202200502	SPARK GAP 1.2KV 1PF(MAX)
Z801	**E-SP-0417-0088**	5202200591	SPARK GAP 1.2KV 1PF(MAX)
Z809	**E-SP-0417-0088**	5202200591	SPARK GAP 1.2KV 1PF(MAX)
Z803	**E-SP-0417-0090**	5202201991	SPARK GAP 200V 1PF (MAX)
Z805	**E-SP-0417-0090**	5202201991	SPARK GAP 200V 1PF (MAX)
PCB BOARD			
U0334	**B-MB-0201-0636**	5053103340	PCB, MAIN BOARD PWB-0334
U0237	**B-CRT-0217-0089**	5053102370	PCB,CRT DRIVE BOARD PWB-0237
U0371	**B-CB-0206-0126**	5053103710	PCB,SWITCH CONTROL BOARD PWB-0371
BASE & PIN			
P101I	**M-MS-0808-6629**	5036200701	ADHESIVE, HOLT MELT LB-1101
P301	**M-WR-0828-0623**	5057415206	WIRE ASS'Y W/15P CONNUL/CSA1007#24 L=330MM
P302	**M-WR-0828-0622**	5057404300	WIRE ASS'Y W/15P CONN UL/CSA1007#24 JST/JAE 400m
P400	**M-MS-0808-6636**	5056203901	PIN RT-01N-2.3A
P401	**PL-PS-0715-0122**	5056407801	BASE & PIN 2.36mm 4P(UL/CSA/TUV)
P402	**M-WR-0828-0615**	5057402353	WIRE ASSEMBLY W/2P L=200MM
P407	**M-MS-0808-6636**	5056203901	PIN RT-01N-2.3A
P408	**M-MS-0808-6636**	5056203901	PIN RT-01N-2.3A
P409	**M-MS-0808-6636**	5056203901	PIN RT-01N-2.3A
P410	**M-MS-0808-6636**	5056203901	PIN RT-01N-2.3A
P411	**M-MS-0808-6636**	5056203901	PIN RT-01N-2.3A
P701	**PL-PS-0715-0133**	5056415326	BASE & PIN 3P (P=2.5mm-I) B3B-EH
P800	**M-WR-0828-0620**	5057402199	WIRE ASS'Y W/2P CONN UL/CSA 1617 #22 LSINX2/SINX23
P801	**M-MS-0808-7921**	5056513117	AC SOCKEY 7014(A)
P803	**PL-PS-0715-0131**	5056415207	BASE & PIN 2.36mm 2P(UL/CSA/TUV)
PA03	**M-WR-0828-0621**	5057402320	WIRE ASS'Y W/15P CONN
PA03	**M-WR-0828-0621**	5057402320	WIRE ASS'Y W/15P CONN UL/CSA 1007#24 CN/IL-G+C450
ASSEMBLY PCB-CRT DRIVE (PWB-0237)			
CAPACITOR			
C900	**E-C-0404-1118**	5242210191	C. CE 50V 100PF J
C900A	**E-C-0404-1118**	5242210191	C. CE 50V 100PF J
C901	**E-C-0404-4374**	5213601091	C. EL 50V 1UF M
C902	**E-C-0404-4137**	5236310491	C. BL 50V 0.1UF Z
C903	**E-C-0404-4329**	5216301091	C. EL 200V 1UF M
C904	**E-C-0404-3472**	5231347191	C. CE 50V 470PF K
C905	**E-C-0404-4754**	5214110091	C. EL 100V 10UF M
C906	**E-C-0404-3352**	5276110491	C. ME 100V 0.1UF J
C907	**E-C-0404-4352**	5214147012	C. EL 100V 47UF M
C907B	**E-C-0404-4325**	5232347291	C. CE 500V 470PF K
C908	**E-C-0404-4326**	5231310391	C. CE 50V 10000PF K
C908A	**E-C-0404-4326**	5231310391	C. CE 50V 10000PF K
C910	**E-C-0404-1118**	5242210191	C. CE 50V 100PF J
C911	**E-C-0404-4330**	5213410191	C. EL 25V 100UF M
C911A	**E-C-0404-4333**	5233310291	C. CE 1KV 1000PF K
C912	**E-C-0404-1118**	5242210191	C. CE 50V 100PF J
C913	**E-C-0404-4331**	5213647891	C. EL 50V 0.47UF M
C914	**E-C-0404-4333**	5233310291	C. CE 1KV 1000PF K
C915	**E-C-0404-1118**	5242210191	C. CE 50V 100PF J
C916	**E-C-0404-4324**	5232315291	C. CE 500V 1500PF K
C917	**E-C-0404-4375**	5210502191	C. EL 50V 2.2UF M
C918	**E-C-0404-4337**	5232310391	C. CE 500V 10000PF K
C919A	**E-C-0404-4326**	5231310391	C. CE 50V 10000PF K
C920	**E-C-0404-4361**	5214410012	C. EL 250V 10UF M
C920A	**E-C-0404-4337**	5232310301	C. CE 500V 10000PF K
C922	**E-C-0404-4131**	5232310291	C. CE 500V 1000PF K
C923	**E-C-0404-4137**	5236310491	C. BL 50V 0.1UF Z
C925	**E-C-0404-4330**	5213410191	C. EL 25V 100UF M

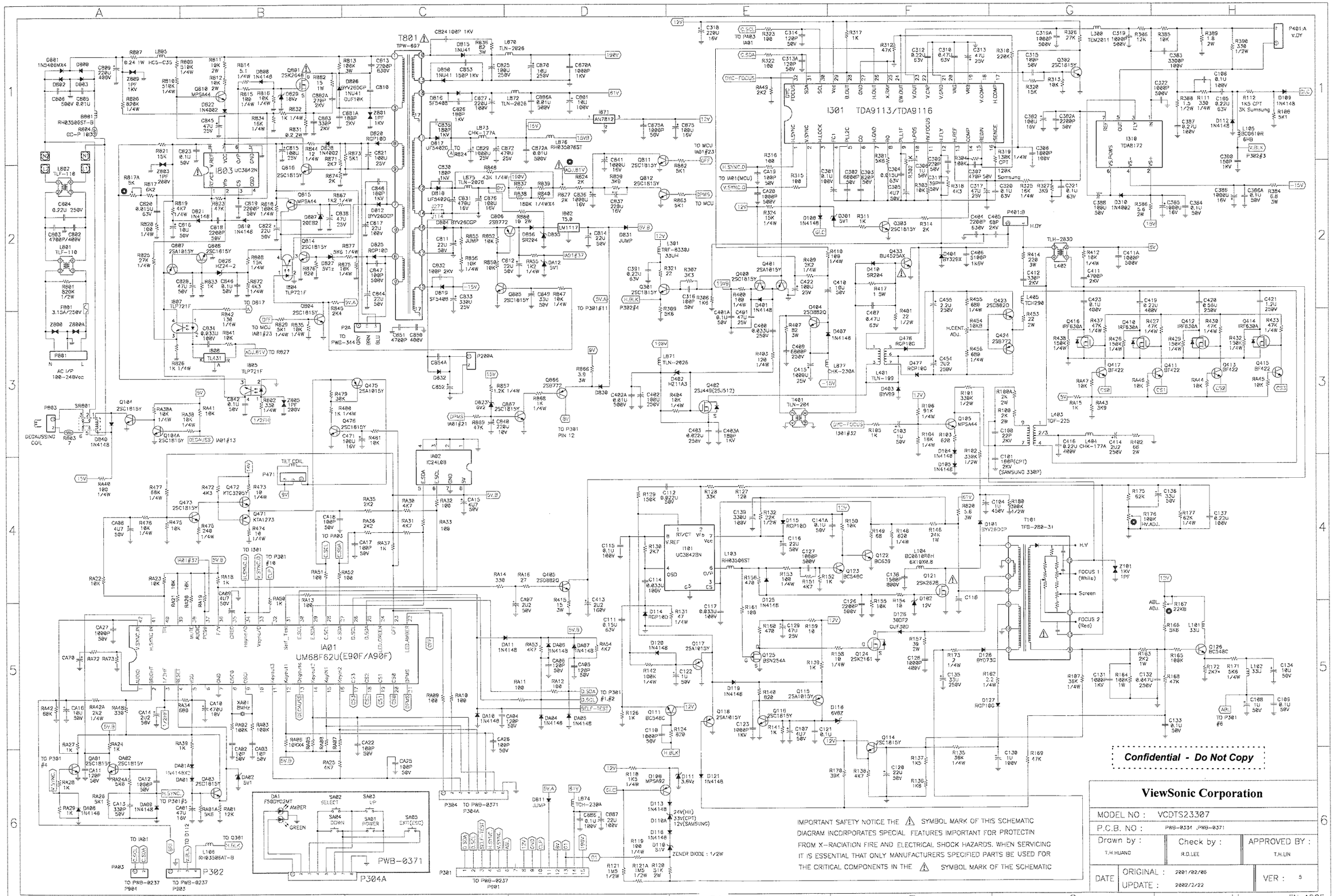
CKT NO.	ViewSonic P/N	Part no.	Description
C925A	E-C-0404-4137	5236310491	C. BL 50V 0.1UF Z
C926	E-C-0404-4323	5233547201	C. CE 1KV 4700PF M
C926A	E-C-0404-1871	5233310191	C. CE 1KV 100PF K
C926B	E-C-0404-3909	5233318191	C. CE 1KV 180PF K
C927	E-C-0404-4326	5231310391	C. CE 50V 10000PF K
C930B	E-C-0404-1118	5242210191	C. CE 50V 100PF J
C931	E-C-0404-4374	5213601091	C. EL 50V 1UF M
C932	E-C-0404-4137	5236310491	C. BL 50V 0.1UF Z
C933	E-C-0404-4329	5216301091	C. EL 200V 1UF M
C933A	E-C-0404-4342	5232356191	C. CE 500V 560PF K
C934	E-C-0404-4359	5213333191	C. EL 16V 330UF M
C934B	E-C-0404-4333	5233310291	C. CE 1KV 1000PF K
C935	E-C-0404-4754	5214110091	C. EL 100V 10UF M
C936	E-C-0404-4137	5236310491	C. BL 50V 0.1UF Z
C937	E-C-0404-4333	5233310291	C. CE 1KV 1000PF K
C947	E-C-0404-4352	5214147012	C. EL 100V 47UF M
C950	E-C-0404-4753	5247318091	C. CE 500V 18PF J
C953	E-C-0404-4137	5236310491	C. BL 50V 0.1UF Z
C953A	E-C-0404-2896	5213310191	C. EL 16V 100UF M
C954	E-C-0404-4137	5236310491	C. BL 50V 0.1UF Z
C958	E-C-0404-4330	5213410191	C. EL 25V 100UF M
C958A	E-C-0404-4137	5236310491	C. BL 50V 0.1UF Z
C960	E-C-0404-4137	5236310491	C. BL 50V 0.1UF Z
C961	E-C-0404-4374	5213601091	C. EL 50V 1UF M
C963	E-C-0404-4329	5216301091	C. EL 200V 1U F M
C965	E-C-0404-4754	5214110091	C. EL 100V 10UF M
C970	E-C-0404-4326	5231310391	C. CE 50V 10000PF K
C972	E-C-0404-4326	5231310391	C. CE 50V 10000PF K
C973	E-C-0404-4330	5213410191	C. EL 25V 100UF M
C978	E-C-0404-4330	5213410191	C. EL 25V 100UF M
C979	E-C-0404-4137	5236310491	C. BL 50V 0.1UF Z
C983	E-C-0404-4358	5213322191	C. EL 16V 220UF M
C983A	E-C-0404-4137	5236310491	C. BL 50V 0.1UF Z
C984	E-C-0404-4373	5213610091	C. EL 50V 10UF M
SEMICONDUCTOR.			
DIODE			
D901*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC.RD)
D902*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC.RD)
D903#	E-D-0403-1255	6611036040	DIODE RECTIFIER BAV21
D904	E-D-0403-1858	6613004934	DIODE SWITCHING 1SS133
D913*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC.RD)
D931*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC.RD)
D932*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC.RD)
D933#	E-D-0403-1255	6611036040	DIODE RECTIFIER BAV21
D934	E-D-0403-1858	6613004934	DIODE SWITCHING 1SS133
D941*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC.RD)
D943*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA ((RA.RB.RC.RD
D961*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC.RD)
D962*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC.RD)
D963	E-D-0403-1255	6611036040	DIODE RECTIFIER BAV21
D964	E-D-0403-1858	6613004934	DIODE SWITCHING 1SS133
D966 (RA)	E-D-0403-2001	6615009752	DIODE ZENER RD6.8EB2-T7
D966 (RB)	E-D-0403-2001	6615009752	DIODE ZENER HZ7B1-TD 6.7-7V
D973*	E-D-0403-1751	6613003032	DIODE SWITCHING 1N4148-TD 75V 150mA (RA.RB.RC.RD)
PS: * 1N4148 RA 6613003032 RB 6613003037 RC 6613003048			
# BAV21 RA6611036040 RB 6611032741			
IC			
I901	E-IC-0401-1264	6644076905	IC, LINEAR VIDEO PER.AMP.M52743BSP SDIP-36
I903	E-IC-0401-2486	6645008907	IC, DIGITAL OSD NT6827-00061 DIP-16
I904	E-IC-0401-2388	6644009606	IC, LINEAR VIDEO AMP. LM2435 T 9PIN
COIL			
L905	E-L-0407-1393	5062122946	CORE, BEAD RH03506AT-B

CKT NO.	ViewSonic P/N	Part no.	Description
L912	E-L-0407-1512	5064439845	COIL, PEAKING TRF-8478M 0.39UH M
L921	E-L-0407-1505	5062122902	CORE, BEAD BL03RN2-R62T4
L935	E-L-0407-1393	5062122946	CORE, BEAD RH03506AT-B
L942	E-L-0407-1513	5064447845	COIL, PEAKING TRF-8478M 0.47UH M
CKT NO		**Part no.**	**Description**
L951	E-L-0407-1505	5062122902	CORE,BEAD BL03RN2-R62T4
L953	E-L-0407-1510	5064010029	COIL, PEAKING TRF-3100J 10UH J
L965	E-L-0407-1393	5062122946	CORE, BEAD RH03506AT-B
L972	E-L-0407-1513	5064447845	COIL, PEAKING TRF-8478M 0.47UH M
L979	E-L-0407-1378	5062119801	COIL, CHOKE EMI CHK-198
L980	E-L-0407-1383	5062202300	COIL, HOR CHOKE TLN-2026
L981	E-L-0407-1383	5062202300	COIL, HOR CHOKE TLN-2026
L982	E-L-0407-1383	5062202300	COIL, HOR CHOKE TLN-2026
L983	E-L-0407-1505	5062122902	CORE, BEAD BL03RN2-R62T4
BASE & PIN			
P901	PL-PS-0715-0156	5056404404	BASE & PIN 14P(2.5mm) IL-G-14P-S3T2-E
P902	PL-PS-0715-0158	5056406500	BASE & PIN IL-G-15P-S3T2-E
P903	PL-PS-0715-0159	5056403404	BASE & PIN 4P(2.5mm-I) IL-G-4P-S3T2-E
P904	PL-PS-0715-0130	5056403204	BASE & PIN 2P(2.5mm-I) IL-G-2P-S3T2-E
P906	M-MS-0808-6636	5056203901	PIN RT-01N-2.3A
P910A	M-WR-0828-0618	5057401407	WIRE ASS'Y W/01P CONN 6X24/0/12 P11351 L=360mm
P911A	M-WR-0828-0616	5057401311	WIRE ASS'Y W/01P CONN 144C P11531 L=190mm
P912A	M-WR-0828-0619	5057401408	WIRE ASS'Y W/01P CONN 6X24/0.12 SMT1741BS-2 L=95m
P913A	M-WR-0828-0617	5057401403	WIRE ASS'Y W/01P CONN 96C/0.12mm 1741BS-2/UL/CSAL
P922	PL-PS-0715-0157	5056404522	BASE & PIN 1.56mm 2P(UL/CSA/TUV)
TRANSISTOR			
Q903	E-Q-0402-1419	6621026430	TR NPN HF BF422
Q910 (RA)	E-Q-0402-1360	6621015332	TR NPN HF 2SC1815Y
Q910 (RB)	E-Q-0402-1420	6621015335	TR NPN HF H945P
Q933	E-Q-0402-1419	6621026430	TR NPN HF BF422
Q963	E-Q-0402-1419	6621026430	TR NPN HF BF422
Q987 (RA)	E-Q-0402-1360	6621015332	TR NPN HF 2SC1815Y
Q987 (RB)	E-Q-0402-1420	6621015335	TR NPN HF H945P
Q988 (RA)	E-Q-0402-1360	6621015332	TR NPN HF 2SC1815Y
Q988 (RB)	E-Q-0402-1420	6621015335	TR NPN HF H945P
RESISTOR			
R900	E-R-0405-6525	5142110295	R. CF 1/6W 1k J
R901	E-R-0405-6559	5142175095	R. CF 1/6W 75 J
R902	E-R-0405-6222	5142113395	R. CF 1/6W 13K J
R903	E-R-0405-6900	5142113295	R. CF 1/6W 1.3K J
R904	E-R-0405-5887	5142822095	R. CF 1/4W 22 J
R905	E-R-0405-6223	5142182295	R. CF 1/6W 8.2K J
R905A	E-R-0405-6904	5142113495	R. CF 1/6W 130K J
R906	E-R-0405-6898	5142851195	R. CF 1/4W 5101K J
R907	E-R-0405-6067	5142815195	R. CF 1/4W 150 J
R908	E-R-0405-6511	5142843095	R. CF 1/4W 43 J
R909	E-R-0405-6556	5142168195	R. CF 1/6W 680 J
R909A	E-R-0405-6900	5142113295	R. CF 1/6W 1.3K J
R910	E-R-0405-6542	5142139195	R. CF 1/6W 390 J
R912	E-R-0405-5883	5142813395	R. CF 1/4W 13K J
R913	E-R-0405-6829	5142851095	R. CF 1/4W 51 J
R914	E-R-0405-3449	5142420190	R. CF 1/2W 200 J
R915	E-R-0405-6520	5142110395	R. CF 1/6W 10K J
R916	E-R-0405-3183	5142810595	R. CF 1/4W 1M J
R917	E-R-0405-6920	5130362303	R. MOF 1W 62K J
R918	E-R-0405-2396	5142818295	R. CF 1/4W 1.8K J
R918A	E-R-0405-6782	5142122295	R. CF 1/6W 2.2K J
R919	E-R-0405-6520	5142110395	R. CF 1/6W 10K J
R919A	E-R-0405-6536	5142120295	R. CF 1/6W 2K J
R920	E-R-0405-6551	5142151195	R. CF 1/6W 510 J
R921	E-R-0405-5914	5142415190	R. CF 1/2W 150 J
R923	E-R-0405-6518	5142110195	R. CF 1/6W 100 J

CKT NO.	ViewSonic P/N	Part no.	Description
R925	**E-R-0405-6546**	5142147195	R. CF 1/6W 470 J
R927	**E-R-0405-6909**	5142130195	R. CF 1/6W 300 J
R928	**E-R-0405-6550**	5142151095	R. CF 1/6W 51 J
R929	**E-R-0405-6518**	5142110195	R. CF 1/6W 100 J
R930	**E-R-0405-6573**	5130533903	R. MOF 3W 3.3 J
R931	**E-R-0405-6559**	5142175095	R. CF 1/6W 75 J
R934	**E-R-0405-5819**	5142833095	R. CF 1/4W 33 J
R935	**E-R-0405-6223**	5142182295	R. CF 1/6W 8.2K J
R935A	**E-R-0405-6904**	5142113495	R. CF 1/6W 130K J
R936	**E-R-0405-6898**	5142851195	R. CF 1/4W 510 J
R938	**E-R-0405-3545**	5142443090	R. CF 1/2W 43 J
R939	**E-R-0405-6762**	5142868195	R.CF 1/4W 680 J
R939A	**E-R-0405-6900**	5142113295	R. CF 1/6W 1.3K J
R940	**E-R-0405-3966**	5142815095	R. CF 1/4W 15 J
R940A	**E-R-0405-6915**	5142191095	R. CF 1/6W 91 J
R942	**E-R-0405-6222**	5142113395	R. CF 1/6W 13K J
R943	**E-R-0405-2400**	5142818095	R. CF 1/4W 18 J
R946	**E-R-0405-3183**	5142810595	R. CF 1/4W 1M J
R947	**E-R-0405-6920**	5130362303	R. MOF 1W 62K J
R948	**E-R-0405-6518**	5142110195	R. CF 1/6W 100 J
R949	**E-R-0405-6518**	5142110195	R. CF 1/6W 100 J
R950	**E-R-0405-6557**	5142168495	R. CF 1/6W 680K J
R952	**E-R-0405-4359**	5142410590	R. CF 1/2W 1M J
R952A	**E-R-0405-5726**	5130310003	R. MOF 1W 10 J
R954	**E-R-0405-2320**	5142847195	R. CF 1/4W 470 J
R955	**E-R-0405-6546**	5142147195	R. CF 1/6W 470 J
R961	**E-R-0405-6559**	5142175095	R. CF 1/6W 75 J
R964	**E-R-0405-5887**	5142822095	R. CF 1/4W 22 J
R965	**E-R-0405-6223**	5142182295	R. CF 1/6W 8.2K J
R965A	**E-R-0405-6904**	5142113495	R. CF 1/6W 130K J
R966	**E-R-0405-6551**	5142151195	R. CF 1/6W 150 J
R968	**E-R-0405-6511**	5142843095	R. CF 1/4W 43 J
R969	**E-R-0405-6762**	5142868195	R. CF 1/4W 680 J
R969A	**E-R-0405-6900**	5142113295	R. CF 1/6W 1.3K J
R970	**E-R-0405-6555**	5142156295	R. CF 1/6W 5.6K J
R972	**E-R-0405-5883**	5142813395	R. CF 1/4W 13K J
R973	**E-R-0405-6300**	5142839095	R. CF 1/4W 39 J
R974	**E-R-0405-6555**	5142156295	R. CF 1/6W 5.6K
R976	**E-R-0405-3183**	5142810595	R. CF 1/4W 1M J
R976A	**E-R-0405-6221**	5142130395	R. CF 1/6W 30K J
R977	**E-R-0405-6920**	5130362303	R. MOF 1W 62K J
R978	**E-R-0405-6903**	5142112395	R. CF 1/6W 12K J
R981	**E-R-0405-6520**	5142110395	R. CF 1/6W 10K J
R982	**E-R-0405-6525**	5142110295	R. CF 1/6W 1K J
R983	**E-R-0405-3090**	5142810195	R. 1/4W 100 J
R984	**E-R-0405-2473**	5142830395	R. CF 1/4W 30K J
R986	**E-R-0405-6220**	5142124395	R. CF 1/6W CF 24K J
R987	**E-R-0405-6582**	5142120095	R. CF 1/6W 20 J
R988	**E-R-0405-6582**	5142120095	R. CF 1/6W 20 J
R991	**E-R-0405-6543**	5142139495	R. CF 1/6W 390K J
R992	**E-R-0405-6905**	5142115095	R. CF 1/6W 15 J
OTHER			
U901	**B-CRT-0217-0089**	5053102370	PCB PWB-0237 248X288/4
V901A	**M-MS-0808-7346**	5056306721	CRT SOKET METALLO 033-0-7700-44 B10-301
Z901	**E-SP-0417-0091**	5202202491	SPARK GAP MITSUBISHI DC300V 1PF DSP-301N-C04F
Z914 (RA)	**E-SP-0417-0090**	5202201991	SPARK GAP DC200V 1PF DSP-201M-C04F
Z914 (RB)	**E-SP-0417-0089**	5202201301	SPARK GAP DC200V 1PF GD412-200V-M
Z944 (RA)	**E-SP-0417-0090**	5202201991	SPARK GAP DC200V 1PF DSP-201M-C04F
Z944 (RB)	**E-SP-0417-0089**	5202201301	SPARK GAP DC200V 1PF GD412-200V-M
Z952 (RA)	**E-SP-0417-0099**	5212200591	SPARK GAP 1KV 1PF
Z952 (RB)	**E-SP-0417-0087**	5202200502	SPARK GAP 1KV 1PF
Z952 (RC)	**E-SP-0417-0086**	5202200501	SPARK GAP SG05G 1KV 1PF

CKT NO.	ViewSonic P/N	Part no.	Description
Z974 (RA)	**E-SP-0417-0090**	5202201991	SPARK GAP DC200V 1PF DSP-201M-C04F
Z974 (RB)	**E-SP-0417-0089**	5202201301	SPARK GAP DC200V 1PF GD412-200V-M

12. SCHEMATIC DIAGRAMS



IMPORTANT SAFETY NOTICE THE ⚠ SYMBOL MARK OF THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTIN FROM X-RACIATION FIRE AND ELECTRICAL SHOCK HAZARDS. WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE ⚠ SYMBOL MARK OF THE SCHEMATIC

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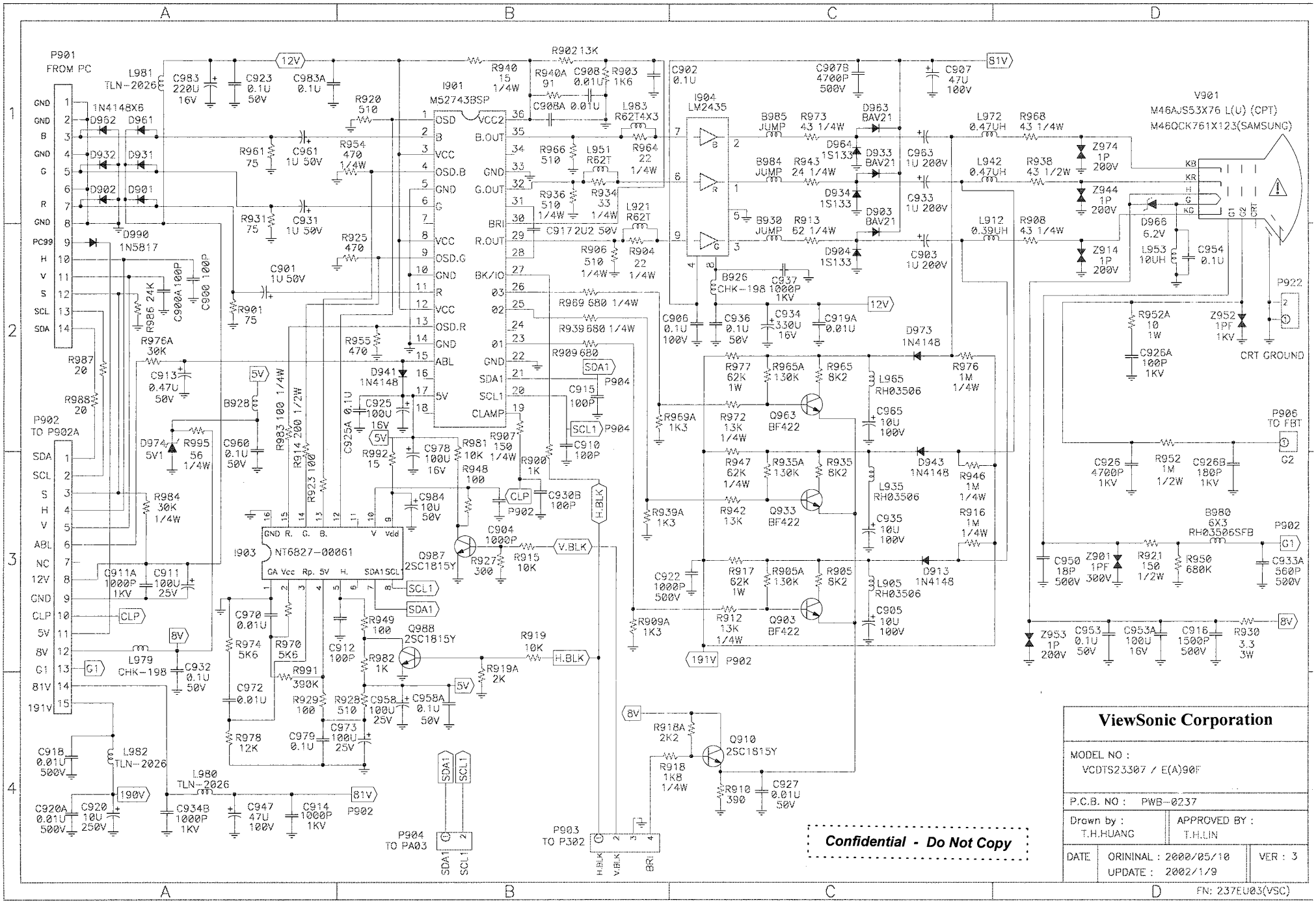
ViewSonic Corporation

MODEL NO : VCDTS23307			
P.C.B. NO : PWB-0334 ,PWB-0371			
Drawn by : T.H.HUANG	Check by : R.D.LEE	APPROVED BY : T.H.LIN	
DATE	ORIGINAL : 2001/02/05 UPDATE : 2002/12/22	VER : 5	

FN.:A90F


P901
FROM PC
I901
M52743BSP
I903
NT6827-00061
I904
LM2435
V901
M46AJS53X76 L(U) (CPT)
M46QCK761X123(SAMSUNG)
P902
TO P902A
P903
TO P302
P904
TO PA03
P906
TO FBT
CRT GROUND
Confidential - Do Not Copy
ViewSonic Corporation
MODEL NO :
VCDTS23307 / E(A)90F
P.C.B. NO : PWB-0237
Drawn by : T.H.HUANG
APPROVED BY : T.H.LIN
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ORININAL : 2000/05/10
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